TYPICAL AND TOP-RANKED POLISH PRIVATE HIGHER EDUCATION:

INTERSECTORAL AND INTRASECTORAL DISTINCTIVENESS

by

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Abstract

This dissertation analyzes the degree and shape of differences between private and public sectors (intersectoral) and within the private sector (intrasectoral) in Polish higher education. The intersectoral hypothesis is that Poland's two sectors are quite different and that these differences mostly follow those claimed and so far found in leading literature on private higher education globally. The intrasectoral analysis focuses on the top-ranked private institutions, for which I hypothesize characteristics of "semi-elite" institutions.

The research develops eight explicit and specific intersectoral hypotheses and then, for intrasectoral analysis, eight such hypotheses on parallel subject matter--Enrollment size, Primary function, Field subject matter, Concentration of institutional offerings, Student quality, Faculty quality, Source of funding, and International orientation.

Each hypothesis is investigated empirically. To do so, I refine indicators employed on other higher education topics and develop some wholly new indicators, statistical ones, on which pertinent data could be gathered. I survey top-ranked private universities to compare these to private sector averages. Interviews supplement the statistical analysis, cross-checking that analysis and extending it.

The findings strongly substantiate the overall hypothesis that intersectoral differences are major and in anticipated directions. Four of the eight specific hypotheses are strongly supported, three others are moderately supported, and for only one the indicators and data are insufficient to draw a conclusion. The findings on whether the top-ranked institutions are semi-elite are mixed, though generally positive. Two

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hypotheses are strongly supported, three moderately supported, two supported in only limited ways, and one is basically not supported.

This national case study not only fits and illustrates but also greatly fleshes out the global findings on intersectoral differences. The intrasectoral analysis—only the second large national study—proves promising for the semi-elite concept, charting new territory but revealing ambiguities and contradictions. Aside from its substantive findings, this study makes methodological strides, on both the intersectoral and intrasectoral fronts, by introducing systematically developed hypotheses, finding indicators for analyzing them, and using data to fuel the indicators. Additionally, the study provides detailed relevant material usable in policymaking by government agencies, private universities, and families.

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Chapter 1 : Introduction

1.1 Research Question and Hypotheses

This dissertation analyzes the degree and shape of differences between private and public sectors (intersectoral) and the degree and shape of differences within the private sector (intrasectoral) in Polish higher education (HE). I hypothesize that Poland's two sectors are quite different and that these differences mostly follow those claimed and so far found in leading literature on private higher education (PHE) globally. My intrasectoral analysis focuses on the top-ranked private institutions. For them I hypothesize characteristics of "semi-elite" institutions.

1.1.1 Research Question

What are principal intersectoral and private intrasectoral differences and how much do they track what can be hypothesized from the leading global PHE literature?

1.1.2 Hypotheses

I hypothesize two forms of major differences¹, one intersectoral and the other intrasectoral. I base this two-pronged hypothesizing on the literature on global PHE. Each prong has a dual nature because it deals with both "how much" different (very) and "how" (e.g., size, job market, etc.). The intersectoral analysis turns on comparing the whole public sector on average to the whole private sector on average. The second part of the project focuses on comparing top-ranked private institutions (PHEIs) to the average

¹ My use of "distinctiveness" and "difference" conveys overlapping concepts and meanings. However, whereas something "distinctive" is always "different," not every difference I identify could be termed distinctive, with the latter's usually positive connotations.

privates and in some cases to the average publics². Being highly ranked is a necessary but insufficient condition to be semi-elite. As with the intersectoral analysis, so with the intrasectoral analysis, for hypotheses to be supported degrees and shapes of differences must be shown by the research findings.

I hypothesize that PHE will greatly differ from public HE on average on a number of dimensions discussed in global PHE literature. On these dimensions, PHE usually can be seen as trailing public HE on conventional academic grounds. On the other hand, I hypothesize that the top-ranked PHEIs fall somewhere between average public and average private on important dimensions. I hypothesize that top-ranked PHEIs have definitional and common characteristics of semi-elite institutions.

1.2 Significance of the Study

Changes in the state's role in the HE system and an increase of market forces influence the growth of PHE in Poland and worldwide. As in most of the Eastern European region, PHE rapidly developed in Poland after the collapse of communism in 1989. Poland quickly grew to have the largest private share, some 34% of total enrollment; these were by 2007/8 spread across some 324 private institutions, in comparison to 131 public institutions. Currently, Poland has the largest percentage of students attending private colleges in the European Union (Kwiek 2010; Levy 2012b).

² Sometimes semi-elite are closer to average public, sometimes to average private. Sometimes means mostly on some indicators or dimensions. It also can mean for some semi-elite institutions more than others, with highest ranked perhaps closer than other semi-elite to the average public. Since I am analyzing the public average I am not looking at public top. Semi-elite might well get to around public averages (or surpass even) while not getting near the public top.

Table 1 shows that Eastern Europe has much higher "independent private³" enrollment (27%) than Western Europe (8%). PROPHE's "Europe," used in the table, is larger than the EU. The EU private share is best put around 12% (Levy 2012b). In any reasonable count, even the Eastern Europe trails the PROPHE global average of 31.3%. But Poland has by far the largest raw PHE enrollment in Europe except for Russia (which is not in the EU).

Region	Private Enrollment	Independent Private Enrollment	Private % of Total HEIs	Private % of Total HEIs Independent Only
Whole Europe	16.3%	12.8%	25.7%	24.8%
Western Europe	10.9%	7.6%	12.0%	43.3%
Central and	31.7%	27.7%	41.0%	
Eastern Europe				
Poland ⁴	34.1%		70.8%	

 Table 1. Private Enrollment and PHEIs in Europe

Source: Author's calculations PROPHE Database

The newly developed private sector became an important player in a HE arena long dominated by the public sector. Probably most literature on private versus public sectors globally and regionally claims fundamental distinctions between sectors (Levy 1986; Levy 1992). But some claim otherwise and there still are few empirical national case studies--and very few contextualized in global and conceptual PHE literature. This study attempts to analyze the size and shape of differences between Polish private and public sectors and the size and shape of differences within private sector but it goes beyond typical national studies precisely by presenting connection to global and conceptual PHE literature and by the breadth and depth of its intersectoral and

³ For the definition of independent private versus government-dependent private and the rationale for focusing mostly on the former, see Levy (2012a).

⁴ Table 1 includes data for Poland on "private enrollment" and "private % of total HEIs" from PROPHE database but for other analysis data for Poland are taken from GUS 2009.

intrasectoral analyses. Thus, this research contributes to scholarly literature but also I expect that findings will provide important information for policy makers, including government, PHEI leaders, and families.

Besides evaluating the degree and shape of differences between private and public sectors (intersectoral) the project analyzes the degree and shape of difference within the private sector (intrasectoral). Much too often in international and Polish literature, PHE is discussed in terms of what it seems typically to be. Consequently, the Polish private sector is stigmatized by a strong perception, based on the visibility of demand-absorbing colleges, that private institutions are not academically serious. Most of the literature on the Polish private sector focuses on description of demand-absorbing colleges based on the evaluation of data from Polish national database called GUS (Duczmal 2006; Dabrowa-Szefler and Jablecka-Pryslopska 2006; Jablecka 2007a; Ernst & Young 2009). This is understandable since those institutions constitute the great majority within the sector. Generalizations about the private sector are thus partly valid but they can be also misleading. In other words, the sectoral generalization can obscure heavy and important intrasectoral variation. Moreover, individual top-ranked PHEIs may have more importance than typical PHEIs do. I hypothesize that there is important variation within the private sector. Substantial literature exists on demand-absorbing private institutions but there is no literature on upper end PHE in Poland or the region. Top-ranked PHEIs may have major semi-elite characteristics foreseen in initial literature on the semi-elite category of PHEIs but very few national studies anywhere even refer to semi-elite and only one, until now, makes it a major focus (Praphamontripong 2010). Consequently, this

study is the first one that concentrates on analyzing semi-elite phenomenon in the Polish or any European case.

As chapters 3-5 elaborate and then chapter 6 synthesizes, we will make claims of major contributions to the scholarly literature. We will do so on empirical, conceptual, and methodological fronts.

1.3 Limitations of the Study

Notwithstanding the breadth of claims about original contributions, I acknowledge that the scope of this study is delimited in several ways. First, the project focuses on PHE phenomena based on the regional and global literature on HE without deeply examining literature on broader modern Polish political and economic policies. In other words, the study lacks major integration with the political-economic and social context of postcommunist Poland. It does not tie the presence of PHE to Poland's (or the region's or world's) overall privatization and marketization, or then to political reservations about privatization. Integral to the political-economic dynamic is the partial privatization within the Polish public higher education sector, but I do not much explore the association of higher education's "two privatizations": PHE growth and the partial privatization of the public sector. The latter would involve more attention directly on the internal dynamics of the public sector, whereas the closest I get is my intersectoral analysis, as when I compare income sources between the two sectors. In reality, HE is of course not a phenomenon isolated from broader political-economic context. However, a counterpoint (which bolsters the significance of the dissertation) is that the literature on politicaleconomic macro picture could benefit from my empirical analysis of the HE arena--the PHE sector and HE intersectoral comparisons.

The dissertation does not engage directly the policy debates related to PHE, though those are major debates in Poland, many echoed in the region and some globally, about PHE. The debates concern a range of matters. I can only say that policy is relevant but it is not my topic and we had to exclude certain relevant topics in order to focus intensively on the broad terrain that we do include. Moreover, this is a retrospective study that cannot predict even the close future of the HE system taking in consideration so many factors that may influence the structures and functions of HE in Poland. Again, I think that my dissertation can contribute greatly to thinking about related subject matter, so in this case my empirical analysis can inform deliberations on policy choices.

Additionally, roughly half of the dissertation's subject matter centers on characteristics of top-ranked PHEIs, without comparable attention inside the public sector. I collect no data on individual public HEIs, instead using average data on the whole public sector. The main justification for this exclusion is that the study of PHE in Poland is rather embryonic in comparison to that of public HE and study of leading or any individual PHEIs is miniscule. With enough time and resource as well as accessibility, an analysis of the public institutions could enhance our knowledge of intersectoral dimensions.

Although this research evaluates concepts of function and funding of HEIs it lacks analysis of a third crucial and often analyzed aspect--governance--of HEIs. Originally the design of the study comprised a proposal of analyzing internal management including power distribution, board structures, and efficiency of HEIs. However, a lack of data sources for measuring these aspects forced me to refocus the research to evaluation of function and funding aspects of the HEIs. Evaluation of governance structures, internal

management, and efficiency is not a part of intersectoral or intrasectoral analyses in this study. However, the HE literature emphasizes that there are important differences between governance of private and public HEIs as well as within private sector (Levy 2008c; Levy 2009a; Praphamontripong 2010).

1.4 Introduction to Polish Higher Education and Private-Public

Distinctiveness

1.4.1 Higher Education before 1949

Poland has a long, rich university history and tradition. The oldest Polish university, Jagiellonian University in Krakow, was founded in 1364 by King Casimir the Great. It consisted of three faculties: liberal arts, medicine and law. The University of Vilnius and the University of Lvov were founded in 1578 and in 1661 respectively. The centralized system of HE, based on the authority of national education government, has its beginning in 1773 when the Commission for National Education (the Komisja Edukacji Narodowej), the world's first national Ministry of Education, was formed in Poland. Over the next two hundred years Poland kept the national government as the most important authority in developing and governing the educational system. In 1816 the first academic institution, Warsaw University, was created in the capital of Poland and in 1826 the first technical university, the Warsaw Polytechnic was founded. Between 1918-1939 the HE system expanded to thirty-two institutions including five state universities in Krakow, Vilnius, Lvov, Warsaw and Poznan, three Polytechnics in Warsaw, Krakow, and Lvov, and one private university, the Catholic University of Lublin, founded in 1918. In addition, Poland had at that time a few other public HE institutions in large cities and about fifteen private institutions that offered courses mostly in economics and political

sciences (Duczmal 2006). Overall, the HE system was an elite system with low enrolment rates and a selective student body coming mostly from the aristocracy and the upper class. Before the Second World War, Polish HE was based on academic and institutional freedom and most institutions determined and managed their own internal affairs. During the war, Poland lost an enormous number (about 60%) of professors (Duczmal 2006).

1.4.2 Higher Education 1949-1989

Between 1945 and 1989 the HE was shaped and strongly influenced by the Communist regime which enforced detailed regulations and rules that dictated almost all activities of HE institutions. The State was responsible at that time for the allocation of tasks and resources devoted to teaching and research with strong emphasis on supporting the communist ideology. Shortly after the War, new HE institutions were established in Gdansk, Szczecin, Torun, Opole and in Wroclaw. In 1946 there were 54 HE institutions with some 86,000 students and 11,000 academics (Duczmal 2006). The years 1949 to mid-fifties brought more restrictions and reductions of autonomy of HE. In 1949 the government nationalized all PHE institutions (excluding the Catholic university) and later the Act of 26 (April 1950) subordinated all HE institutions to the Ministry of Science and Higher Education. In the 50s and 60s HE was a target of more restrictions and an antiintellectual campaign dictated by the government. Due to rapid economic growth, HE experienced a growth in terms of student and faculty number in the 70s (Gorecka 2005) when six new public institutions were established. Unfortunately, the economic downturn brought a decrease in student numbers in the 80s. The Higher Education Act of 1982, which functioned up to 1990, did not differentiate among the HE institutions. Overall,

between years 1949-1989 the student body's composition was more diverse than before the War when most students came from elite, high-income families. But the student body, as in Communist Europe generally, remained comparatively small in relation to that of Western Europe.

1.4.3 Higher Education after 1989

In 1989, after almost 50 years of the Soviet-domination, the Polish parliament amended the Constitution and the state was renamed the Republic of Poland defined as a democratic republic. At that time, the economic situation was critical with a domination of an inefficient public sector and with very limited private enterprise. The Polish HE system in 1990 followed the general pattern of the in economy, and was entirely public, with one semi-private religious university, the Catholic University of Lublin. The provisions of the Higher Education Act of September 12, 1990 permitted the development of PHE, although private providers were excluded from state subsidies. The new law, combined with other factors such as the huge demand for HE combined with the inability of meeting the demand in the public sector, influenced the very rapid growth of private institutions (Slantcheva and Levy 2007; Kwiek 2004). Further expansion and diversification of HE was backed by the Vocational Higher Education School Act from 1997 which provided much easier regulations for opening new public and PHE institutions. The new institutions established after 1997 are registered as vocational schools and can offer only bachelors and engineering degree programs, without having permission to apply for master's level courses. Currently, Poland has the largest percentage of students attending private colleges in the European Union (Kwiek 2010; Levy 2012b). Only two Polish public universities, the Jagiellonian University and

Warsaw University, make the Shanghai ranking in the four hundred universities worldwide. Besides being ranked by the world rankings, the Jagiellonian University is also ranked 133 out of 171 and the Warsaw University is ranked 134 in the regional European ranking on productivity and visibility of European universities (Ernst & Young 2009).Consequently, only a few Polish public universities qualify as elite. But even the best private universities lie below these leaders⁵.

⁵ For an analysis of how Central Europe (including Poland) substantially trails Western Europe academically, see Kwiek, European Educational Research Journal Volume 11 Number 1 2012 www.wwwords.eu/EERJ111 <u>http://dx.doi.org/10.2304/eerj.2012.11.1.111</u> Universities and Knowledge Production in Central Europe

Chapter 2 : Review of the Literature on Private Higher Education

2.1 A. Global PHE- with Focus on Intersectoral Differences and Private Intrasectoral Differences

2.1.1 Intersectoral Differences between the Private and Public Sectors

The most extensive analyses in the field of HE private-public distinction are Levy's studies (1986; 1992; 2002; 2006; 2007; 2008b). Built around the concepts of finance, governance, and function, Levy's 1986 study of private-public differences and ideal types of PHE in different Latin American HE systems is still contemporary and widely cited globally. In his recent work, Levy (2008a) emphasizes how one of the most striking global changes in HE is privatization. A few decades ago, PHE was absent or marginal in most countries. Now PHE accounts for roughly a third of total global enrolment. Historically, the US was a one of the few countries that had a well-developed private sector but over the years PHE spread in Asia and Latin America. Recently, the growth of the private sector is visible in the Middle East, Central and Eastern Europe, and Africa (Levy 2008c; Kinser et al. 2010). The striking growth goes against the "Continental Model" of HE so commonly present in Europe where standardization, state control and public monopoly were the status quo for decades. The public policy and PHE growth suggest "a pluralist, decentralized model more than a government designed and directed one" (Levy 2008b). International literature shows that the Continental Model's standardization in structure, process, and status, is diminished by a modern trend in which the state steps away and pluralism, differentiation, and competition rise. The new structure moves toward the American model which according to Clark (2004) encourages market-based and status-drives that condition PHEIs and public HEIs in defining

themselves, seeking external resources, and setting their conditions for research, teaching, and learning.

Levy's (1992) Analytical Framework of Private-Public Differences

In HE literature private-public differences have been discussed from different angles in various studies. Previous empirical case studies in Asia, Latin America, and the US have confirmed the existence of institutional differentiation between private and public HE institutions (Bernasconi 2004; Geiger 1986; Levy 1986; Levy 2004; Levy 2012a). One study that concentrates exclusively and systematically on the private-public differences is Levy's work on "Private Institutions of Higher Education" published in 1992. This work is fully devoted to analyzing differences (or lack thereof) between the two educational sectors; that is why the findings of that study are presented here and used for designing the Polish case study. Levy there analyzes PHE along the dimensions of growth, funding, and governance--contrasting the findings with the public sector. Overall, the sectors present fundamental differences not only along those three dimensions but also in terms of size and performance.

Evaluation of growth of public and PHE sectors shows that there are differences between reasons and patterns of development between those sectors. Historically, most countries had developed monopolistic public HE system or close to that. The United State was one of the few countries with a significant dual system.

In terms of size private institutions are smaller than public institutions; this fact is related to a specialization of privates regardless of the size of overall private sector (Levy 1992). PHEIs tend to undertake more specialized tasks than public institutions and offer a more limited number of programs, even sometimes concentrating on only a single

subject. Their specialization is overwhelmingly in inexpensive fields (Levy 1992; Levy 2002). In contrast, public universities often manage a fairly wide selection of programs and can effort offering expensive programs, sometimes with well-developed research facilities. In contrast, most PHEIs, particularly outside the United States, do not focus on research activities and lack the expensive facilities for it.

According to Levy (1992) private finance is tight and narrow, often dependent fully on tuition and related student fees. For example, tuition is the main income source in Japan and it accounts for more than two-thirds of the income of perhaps two-thirds of United States PHEIs. In contrast, public HE is overwhelmingly governmental-dependent, so private-public distinctiveness in financial source is strong (Levy 1992). Despite the fact that funding does not lead to regulation in a simple one-to-one relationship, PHE is generally more autonomous of government than is public HE. Within most dual-sector systems the PHEIs govern themselves more privately than do public ones (Levy 1992).

However, Levy (1986; 2004) notes that private-public differences sometimes are blurry and becoming more so over time in systems when considering funding sources, autonomy and accountability, governmental control, and institutional management. Similarly, Kwiek (2008a) suggests that the wide process of privatization of private and public sectors in Poland can be viewed as one process with two faces: external and internal. But nevertheless, both authors emphasize differences in management methods, funding and functions between private and public HEIs. Levy (1986) originally focused on the Latin American countries where as Kwiek (2008a) put special attention to the Polish as well as other European cases.

2.1.2 Intrasectoral Differences of Private Higher Education

Levy's classification of Higher Education Institutions

Levy (2008a) identifies three principal types of PHE institutions: religious-cultural, elite/semi-elite, and demand absorbing/non-elite. This categorization is based on previous versions of classifications of HE institutions also proposed by Levy but the updated version attempts to encompass the newest and fastest-growing PHE. For each category the author identifies causes of growth and gives an overview of the category's size, shape, and regional weight. In addition, information about the key financial and regulatory policies in practice is presented for each category.

Religious-cultural institutions tend to be pioneers in private nonprofit sectors. They usually do not receive major public funding, following the rule that government has much less responsibility to support PHEIs than public ones. Some of the institutions do not even lobby for institutional support in order to protect their autonomy (Levy 2008c). Most of the religious institutions are nonprofit and have established credibility and academic quality.

Demand-absorbing and non-elite institutions tend to be the largest private type. They develop mostly to meet the large number of students that cannot be served by the public institutions, which do not have enough funds to expand for all students. In any event, "demand-absorbing HE is the least common recipient of government funding" (Levy 2008c).

Elite PHE is quite rare outside the United States, as illustrated by the world's ranking of 200 top universities. Semi-elite institutions have good reputation and lie somewhere between elite and non-elite institutions in the institutional hierarchy of HE. Common characteristics of semi-elite institutions include an entrepreneurial and market-

oriented profile, conservative politics, and pro-Western, pro-globalization norms. Much more information about how to define and operationalize semi-elite is presented in chapter 3 and then chapter 5 is entirely devoted to presenting and analyzing our findings on semi-elite.

Silas (2008), Praphamontripong (2010), and Mizikaci (2011) apply Levy's framework to study private intrasectoral differentiation in, respectively, one large Mexican state, Thailand and Turkey. Each thus gives some attention to the semi-elite subsector, as we proceed to see.

Initial National Case-Studies of Semi-Elite

In comparison to the issue of differences between the public and private sectors there are many fewer studies on intrasectoral differences within the private sector, and in particular just a new and as yet very small literature on semi-elite, which includes the Levy (2008a; 2009b) theme paper and pioneering national case studies (Mizikaci 2011; Praphamontripong 2010; Silas 2008; Musial-Demurat 2008). Already, three cases, Thai, Mexican (Nuevo Leon) and Turkey, include evaluation of postulated characteristics of semi-elites. Easily the most extensive study until now is by Praphamontripong (2010) who explores Thai PHE amply using Levy's typology and his semi-elite formulation. Silas (2008) focuses on the dissection of the PHE sector in Mexico, placing special emphasis on the process of diversification. The Turkish case focuses on evaluation of demand-absorbing and semi-elite PHEIs. All these case studies on private sectors have successfully used Levy's first draft on semi-elite institutions (2008). As the case study information has come in Levy has modified his formulation, moving a few former

suppositions about semi-elite to just dimensions that have to be explored in more cases (age, size, specialization versus breadth).

All three other researchers, Praphamontripong (2010), Silas (2008), and Mizikaci (2011) present evidence of existing of semi-elite institutions in their countries. For example, Praphamontripong and Silas report that semi-elite teaching and training is serious but research is limited with an exception of basic applied research. These findings are consistent with Levy's suppositions. But the authors do not confirm all tentative characteristics of semi-elite. For example, Praphamontripong (2010) suggests that Thai semi-elite institutions are larger and older than average PHEIs; this finding does not support Levy's preliminary assumption that semi-elites are relatively young and small institutions. Similarly, the original assumption that semi-elite institutions, just like typical PHEIs might be largely niche institutions concentrated in a particular field or cluster of fields (Levy 2009a) was not supported as Praphamontripong (2010) and Silas (2008) found that semi-elite institutions offer a relatively wide range of programs in various fields. In contrast, preliminary research done by Musial-Demurat (2008) suggests that Polish leading PHEIs are relatively specialized and offer narrow range of programs. Additionally, the Turkish case indicates that semi-elites have superior research performance over the other private universities--and over most public ones. Having well developed research is not a common characteristic of semi-elite. Thus the goal of my study is to explore further how much what the literature has said about semi-elite characteristics plays out in a detailed Polish case. We will be on the alert for findings that challenge the literature, thereby further suggesting a further modification in the definition of semi-elite.

2.2 Regional PHE - Focus on Eastern Europe

2.2.1 Introduction to the Eastern European Region

The development of PHE was rapid in many countries worldwide but the growth is especially sudden in Eastern Europe (S. Slantcheva and Levy 2007). Most of the studies on PHE in the region focus on describing national cases rather than on applying general concepts and theory to analyze the phenomenon of the growth. In this section I identify the major exceptions to the lack of literature and comparative context.

A recent volume *Private Higher Education in Post-Communist Europe* (Slantcheva and Levy 2007) evaluates the development of PHE in Eastern Europe with chapters addressing the growth and role of the private sectors of HE. First five chapters discuss the legitimacy of the PHE from a regional perspective. Part two of the book includes chapters that individually examine national PHE sectors with focus on issues related to their legitimacy. Overall, part one of the book goes beyond just the typical national case studies, whereas part two of the book focuses on national cases. The national cases include evaluations of private sectors in Romania, Russia, Poland, Bulgaria, and Ukraine.

The rising role and relevance of PHE in Europe" edited by Wells, Sadlak, and Vlasceanu (2007) is the second important volume on PHE in Eastern Europe and indeed reaches to Europe more widely. This volume examines the scope and functioning of PHE in 13 national contexts in the European region. The national country cases provide evidence of the growing relevance of PHE especially in Eastern Europe over the last 30 years. The case studies on PHE include following countries: Albania, Austria, Bulgaria,

Estonia, Germany, Italy, Poland, Portugal, Romania, the Russian Federation, Spain, Turkey and Ukraine.

Other research that evaluates PHE systems in the Eastern European region, beyond a single country, includes Pachuashvili's (2009) publication on the politics of HE: governmental policy choices and PHE in post-communist countries with special attention on comparisons between Hungary, Georgia, Latvia, and Lithuania. This publication is in fact a great exception to the literature in that it not only goes beyond one country but is truly comparative among them.

There are rich publications by Kwiek in which European HE is discussed in detail, usually with a focus well beyond PHE but often including PHE. In recent publications, Kwiek analyzes the current development, future changes and major policy issues (2009a; 2009b). Previous Kwiek articles and book chapters have examined entrepreneurialism and PHE in Europe (2008b), the European integration of HE and the role of PHE (2007), and concepts of accessibility and equity related to developments of HE in Eastern Europe (2008b). In a recent book (2011a) Kwiek evaluates the transformations of university in terms of institutional changes and educational policies in Europe.

Additionally, a recent piece (Levy 2012b) on how important PHE is in Europe provides information on growth and size of private sectors in this region. Overall, Europe has a lower PHE share than the global average with Eastern Europe having markedly higher PHE shares than does Western Europe. The big growth of PHE occurred in Eastern Europe in the first half of the 90s but the region has been relatively limited in

PHE growth in the last decade. In terms of private-public distinctions, they are indeed substantial in finance, governance, and activities.

2.2.2 Growth and Characteristics of PHE Sectors in Eastern Europe Commonly Discussed in the Literature

Most of the literature on PHE in Eastern Europe focuses on evaluating the growth and the role of private sector. Three major elements of growth are commonly discussed in the literature: the reasons of the development of private sector, the existence of variation of growth in the region, and the rapid nature of growth. Authors report that significant transformation of the HE field, related to the diminished state involvement in funding and governance of HE, occurred since the collapse of the communist regime in Eastern Europe (Pachuashvili 2009; Slantcheva and Levy 2007). After the time of repression partially derived from reinforcement of uniformity in system and abolition of private sector, 1990 brought new opportunities for development of PHE. Since 1990 we have witnessed unmatched growth of PHE in most former communist countries (Slantcheva and Levy 2007).

Research emphasizes that while the historical background of the growth is throughout the region significant variations exist with respect to PHE when we consider individual countries (Slantcheva and Levy 2007; Pachuashvili 2009). In Croatia and the Slovak Republic, PHEIs educate as few as 3.0 and 4.6% (for academic 2004/2005); in comparison, private sectors in Estonia, Poland, and Rumania have enrolled roughly onethird of all students. Other countries such as Bulgaria, Hungary, and Russia have more moderate private enrollments, around 15% (Slantcheva and Levy 2007).

The development of PHE growth was unanticipated in many Eastern Europe countries, and the government responds reactively, but slowly, to the new reality with

public policies (Levy 2002). The rapid establishment of new PHEIs happened with a lack of well-established legal frameworks (Jablecka 2007a; Jablecka 2007b); rather, PHEIs "arose amid a legal vacuum, neither precisely forbidden nor monitored" (Levy 2006). Only after certain time did the state decide to create a clearer legal and policy framework for the private sector (Levy 2006).

Three important characteristics of PHE sector in Eastern Europe are commonly examined in the literature. Authors discuss the main role that majority of PHEIs play by educating students who cannot be accommodated by public HE sectors. A lack of legitimacy and a lack of governmental funding are the two other characteristics of PHE sector examined in literature.

A significant increase of demand for HE, political changes and inability or unwillingness of the state to finance the totality of expansion allowed development of private sector in post-communist countries (Slantcheva and Levy 2007). This is of course consistent with Levy's demand-absorbing type developed globally. Relatedly, PHEIs spread across the region to fill gaps in the HE landscape formed by the increase demand for HE and the emerging market economies (Slantcheva 2007)

Perceptions of PHEIs in Eastern European countries shown by state authorities and policy makers are often fraught with suspicion, mistrust, and negativism (Reisz 2003). According to Slantcheva and Levy (2007), a lack of long-standing traditions of PHE across the Eastern European counties combines with the general public mistrust of market forces in education.

In terms of funding, post-communist countries follow a world pattern characterized by a lack of annual, direct governmental funding. However, this allows for

some indirect funding, including and accommodating tax policy for PHEIs, all highly variable by (Levy 2007; Pachuashvili 2009).

2.2.3 Polish Higher Education- Focus on PHE

The large majority of Polish PHEIs is markedly non-elite. The Polish literature on the private sector describes many characteristics of non-elite institutions without placing much attention towards characteristics of leading PHEIs. The Polish private sector is stigmatized by a strong perception that PHEIs are not academically serious (Duczmal 2006; Jablecka 2007a). Most of the literature on the Polish private sector focuses on description non-elite colleges or private-public comparisons based on the evaluation of data from Polish national database called GUS.

Development of Polish PHE

Changes in the state's role in the HE system and increase of market forces influence the growth of PHE in Poland and worldwide. Currently, Poland has one of the largest percentage of students attending PHE in the European Union (Kwiek 2010). Poland and Romania have had the highest percentage in certain years (Levy 2012a), with countries like Latvia and Estonia sometimes being high as well, whereas in Western Europe only Portugal has had over one-fifth of enrollment in PHE. The PHE system rapidly developed in Poland after the collapse of the communist political system in 1990. In 1990, Poland had 111 HE institutions run by the state and one non-state university, the Catholic University of Lublin (GUSa). After the political change, the provisions of the Higher Education Act of September 12, 1990 permitted the development of the private sector of HE. The new law, with other factors such as the huge demand for HE combined with the inability of meeting the demand in the public sector, influenced the very rapid growth of

PHEIs (Kwiek 2004; Slantcheva and Levy 2007). The changes of the Polish economy⁶ brought a new perception of education which, for many students, was seen as a private good, a commodity to be paid for, rather than as a traditional public good in the way it has been cultivated in public universities. These factors influenced development of PHE in many East European countries. In addition, several other factors influenced the growth of PHEIs in Poland such as the demographic peak of young people from the 19-24 age group, unemployment rates among the low-educated group, and expectations of relatively high earnings among graduates (Jablecka 2007a; Jablecka 2007b). All this may be in serious question just a few years later (Kwiek 2011b), basically subsequent to our data analysis.

All these factors help to explain the extremely rapid rise in the number of PHE institutions in Poland from 3 in 1990 to 280 in 2004, with more than half a million enrolled students (Scott 2000). The annual growth rate of students increased about 66% on average between 1993/94 and 1998/99 in the private sector (Duczmal 2006). After this rapid growth, the annual growth rate decreased to about 6.3% by the end of the 2003/2004 academic year. Poland quickly grew to have one of the largest private share in Eastern Europe, some 34% of total enrollment; these were by 2007/8 spread across some 324 PHEIs, in comparison to 131 public institutions. The development of the private sector gave many students opportunities to gain HE degrees. In addition, data show that the share of students from disadvantaged backgrounds, especially rural communities, rose from 2% in 1990 to 10% in 2002 and again to 20% in 2005, while the total number of students rose from 400,000 in 1990 to almost 2,000,000 in 2006 (Kwiek 2008a; OECD

⁶ The rapid development of economy stimulates many parents and students to make a decision to invest in education with expectation of the possibility of career development.

2006; Dabrowa-Szefler and Jablecka-Pryslopska 2006). Consequently, the growth of the private sector helped greatly to increase access among young people in Poland.

Characteristics of Polish PHE with attention to private-public distinctions

Most Polish PHEIs have so far been found to be teaching-focused, with research being a marginal activity both in terms of academic mission and in terms of funding (Kwiek 2008a; Kwiek 2008b). The lack of research in Polish institutions can be explained by the fact that privates are not the top-status institutions, and do not attract the best professors and the best students. In addition, the law does not allow privates to receive most types of governmental research funds; privates can only compete for state research grants but the competition terms are very rigorous (Jablecka 2007b;(Kwiek 2008a; Kwiek 2008b). PHEIs receive very limited funding from state research grants. There are no state subsidies for teaching in PHEIs so the majority of the privates' incomes come from tuitions and fees. In contrast, state subsidies are the main sources of funding for teaching for public institutions, followed by tuition fees (Kwiek 2008a; Kwiek 2008b).

In terms of offering different levels of programs, private schools predominantly offer bachelor programs. Only about 25% of PHEIs offer master programs, only six of them can confer doctoral degrees, and just a single one has the right to award the second doctorate (doctor habilitatus)⁷ (Jablecka 2007b). Offered programs are from fields of such as business, administration, accounting, tourism, English, and computer science (Jablecka

⁷ The second doctorate (doctor habilitatus) is a professorial qualification, higher doctorate awarded to candidates who finished the habilitation. Habilitation is the highest academic qualification a person can achieve by his or her own pursuit in certain European and Asian countries. Earned after obtaining a research doctorate, the habilitation requires the candidate to write a professorial thesis based on independent scholarly accomplishments, reviewed by and defended before an academic committee in a process similar to that for the doctoral dissertation.

2007b; Kwiek 2008a; Kwiek 2008b). Not only do privates offer programs only in certain fields but also many of them limit their offerings to only a single study program (Jablecka 2007b). Many public institutions offer much more diverse programs from various fields of study (Duczmal 2006).

Polish PHE institutions do not have their own staff, in general (Jablecka 2007b). Average privates employ only the minimum number of professors (faculty with the professorship title or habilitation degree) required by law, and mostly emeriti. Most PHEIs rely on part-timers to minimize costs or they hire full-timers who already hold full-time positions in public institutions.

Plainly, we are already not without some studies of Polish PHE. On the other hand, most of that study has a descriptive character based on the GUS database. The data extracted from GUS are reported in order to present salient characteristics of PHE, sometimes to show that public and private sectors are different. Missing in the literature is systematic gathering and analysis of data based on a firm research design. Without that we simply cannot know the extent and shape of phenomena even when we can already see that a phenomenon exists. Also usually missing is use of theoretical frameworks for the evaluation of inter and intrasectoral differences. Most authors do not start with literature's findings and develop a systematic application to the Polish case; rather they make observations about GUS factors and provide interpretations (usually ad hoc) of those observations. Moreover, most literature focuses specifically on describing Polish PHE without referring to regional or global findings. This approach is understandable when the focus is given only on the Polish case but then analysis of the case lacks context and perspective. Among the most cited Polish authors, Kwiek (2008) is the most

advanced in writing about Polish PHE and private-public comparisons with regional and global comparisons. In numerous publications, while evaluating various phenomena related to Polish PHE or private-public comparisons, Kwiek presents findings and discusses them within the regional and global contexts. In this research, I often follow Kwiek's approaches in terms of using analytical frameworks to analyze HE phenomena and placing the findings in broad perspectives. In contrast to Kwiek's analysis, this project focuses directly on analyzing degrees and shapes of differences between private and public sectors (intersectoral) and at the same time degrees and shapes within the private sector (intrasectoral) in Polish HE.

Intrasectoral distinctiveness

In contrast to the several general descriptions of the PHE sector, embellished by some private-public statements, there is a very limited literature on the intrasectoral diversification of the Polish private sector. Mostly, the Polish literature discusses PHE in terms of what it seems typically to be. The Polish private sector is stigmatized by a strong perception based on the visibility of non-elite colleges that PHEIs are not academically serious (Jablecka 2007b). This is again understandable since those institutions constitute the great majority within the sector. Some authors like Duczmal (2006), while evaluating various phenomena of the whole private sector, provide some informational statements about differences within the sector. For certain analysis the private colleges are divided into HE institutions and vocational schools established based on the Act from 1997. For other analysis, Duczmal evaluates regional differences between private providers from Warsaw, metropolitan areas, middle-size cities, and small cities; none of these dimensions, however, engages the idea of discriminating on the character of the

institutions or of what the literature on PHE globally analyzes as "sub-types" of PHE. The farthest authors get is, for example, where Duczmal (2006) notes that a few PHEIs have high quality/high price strategy in comparison to the majority of 'non university' PHEIs, with fewer vocational, low cost study courses. Generally missing in the Polish literature are systematic studies on diversification within the Polish private sector with use of analytical frameworks and comparisons to the regional and global findings on intrasectoral differences in private sectors.

Chapter 3 : Research Design and Methodology

3.1 Eight Dimensions of Private-Public Comparison

3.1.1 General Distinctiveness between Private-Public in the Global PHE Literature

Based on the literature on global higher education (Levy 1986; Levy 1992), I hypothesize that private and public sectors are very different from one another in Poland. This hypothesis has a dual nature because it is a hypothesis of "how much" different (very) and "how" (e.g., size, sources of funding, etc.). I focus on comparing the whole public sector on average to the whole private sector on average. Although the second part of the project focuses on intra rather than intersectoral comparison, it too has an important intersectoral component. This is because I hypothesize that the top-ranked PHEIs have characteristics between those of the average private and average public colleges.

I formulate eight private-public hypotheses for this study. Each is grounded in the global PHE literature, always by assertion there, sometimes by evidence there. Each deals with important subject matter. I do not assert, however, that they deal with the eight most important claims about intersectoral distinctiveness. As we shall see, choices have been constrained by feasibility regarding indicators and data. For each global claim listed here I cite the most global literature, i.e. making global generalizations but, as we will see in chapter 2 and beyond, many single country pieces and a few regional pieces have made or substantiated similar claims.

1) Claim: Enrollment size

The literature on PHE suggests that average PHEIs are smaller than public institutions. Sometimes small size is related to content specialization of privates (Levy 1992).

2) Claim: Primary function

Global analysis shows that research and expensive facilities are rarely found in privates outside the US (Levy 1992). Most private institutions focus on teaching and training rather than on conducting research (which in most cases requires substantial funding and advanced faculty and graduate student bodies).

3) Claim: Concentration of institutional offerings

Global research shows that private institutions are more specialized and often offer fewer programs than public HE institutions (Levy 1992).

4) Claim: Field subject matter

PHE literature (Levy 1986; Levy 1992; Levy 2010b) indicates that public HEIs often present a fairly wide selection of programs and can offer "hard" science expensive programs, sometimes with well-developed research facilities. In contrast, PHEIs focus on offering inexpensive programs, usually with market and job orientations which do not require expensive facilities but are believed to offer reasonable labor market prospects.

5) Claim: Student quality

Global PHE research indicates that in most countries, (excluding the US) the best public universities attract the best prepared students. These students want to receive degrees from prestigious institutions (and without having to pay substantial tuition, due to governmental subsidies for the public sector) (Levy 2010a; Levy 2010b)

6) Claim: Faculty quality

The literature indicates that PHEIs (outside the US) tend not have their own full-time staff. They hire part-time faculty largely to minimize the costs of education students. In

contrast, public institutions more often have their own staff, using part-timers more as complements (Levy 2010b).

7) Claim: Sources of funding

The funding structure discussed in the global literature indicates that usually public institutions are heavily subsidized by their governments whereas private institutions typically depend fully or almost fully on tuitions and related students fees (Levy 1992; (Levy and Praphamontripong forhcoming).

8) Claim: International orientation

The intersectoral differences in internationalism are not widely discussed in PHE literature. However, Levy (2004; 2007; 2009a) suggests that PHEIs tend to be more internationally oriented than public HEIs. One main reason for this trend is the need of increasing legitimacy among PHEIs which often have less national legitimacy.

3.1.2 Eight Hypotheses on Private-Public Distinctiveness in Polish HE

My private versus public hypotheses for Poland overwhelmingly track the claims of the global PHE literature. If I had reason, based on prior knowledge of the Polish case or my reading of related literature, to alter anything significantly, I would have. I have, however, had to formulate hypotheses—specific and formal enough to evaluate empirically-- out of what have hitherto been claims, findings, or suppositions. Additionally, I tweak the literature's claims, as when I twice hypothesize that the differences between sectors will be strong.

1) Hypothesis: Enrollment Size

I hypothesize that Polish PHEIs are smaller on average than are Polish public HEIs. And I strengthen the hypothesis in expectation that not only are there intersectoral differences but that they are strong in magnitude such that PHEIs are much smaller than public HEIs.

2) Hypothesis: Primary function

I hypothesize there are sharp intersectoral differences in primary function between private and public HE sectors in Poland. The PHE sector focuses on teaching and training and is far behind the public HE sector in terms of research.

3) Hypothesis: Concentration of institutional offerings

I hypothesize a difference in the degree of concentration between private and public HEIs in Poland when it comes to fields of study. Polish PHEIs are niche institutions with a narrow range of offered study programs whereas public institutions offer more diverse number of programs.

4) Hypothesis: Field subject matter

I hypothesize that the private sector's offerings are concentrated in a set of "soft" fields, inexpensive to offer, whereas public enrollments are much higher than the private's in the "harder" and costlier to offer disciplines.

5) Hypothesis: Student quality

I hypothesize that Polish public HEIs attract the leading students who compete for free prestigious places in nationally known universities whereas PHEIs, in contrast, have much less selective institutional admission policies and accept students with lower qualifications than their public counterparts.

6) Hypothesis: Faculty quality

I hypothesize there are intersectoral differences of faculty quality in the private and public HE sectors with faculty quality being lower in the private sector than in the public sector.

7) Hypothesis: Sources of funding

I hypothesize that there are intersectoral differences strong in magnitude between sources of funding in private and public sectors of HE in Poland. Whereas Polish public HEIs are heavily subsidized by the Polish government, Polish PHEIs depend almost fully on tuitions.

8) Hypothesis: International orientation

I hypothesize that Poland's PHEIs are more internationally oriented than the public HEIs.

3.2 Eight Dimensions of Semi-elite Analysis

I will evaluate how and how much Poland's top-ranked PHE institutions differ from (the average of) the private and public sectors *along the lines of semi-elite characteristics*. The concept of semi-elite institutions was introduced by Levy (2008a; Levy 2009b). It was added to Levy's previous three types of PHE institutions: religious-cultural, elite, and demand absorbing/non-elite, obviously modifying the previous elite category. The semi-elite category was created to investigate a private type which according to Levy might well be a more viable global category than is "elite" (which is rarely valid outside the Americas).

3.2.1 Levy's Semi-elite Definitional Characteristics

Minimal criteria-- definitional characteristics-- are identified as what is required for an institution to be semi-elite. These two criteria are being private and standing above nonelite institutions. These two characteristics are "necessary". An institution cannot be

semi-elite without them. The criteria are not "sufficient," however. Semi-elite would not mark a robust type if limited to these two minimally necessary characteristics. Research is only beginning to probe what other characteristics might become part of the identifying definition, as opposed to characteristics that are commonly associated but not definitional.

It is no simple task to discover how common a range of institutional characteristics might be but clearly we want to restrict our search to institutions that meet the required, definitional conditions. Although certain public HEIs surely have some of the postulated semi-elite characteristics, by definition they cannot be semi-elite institutions and thus are not my concern here.⁸

The second definitional characteristic of semi-elite institutions concerns their place in the institutional hierarchy. Semi-elites stand between elite and non-elite institutions. They have identifiably more than average selectivity and status. But elite PHE is quite rare outside the United States, as seen in the London Times and Shanghai global rankings⁹ (Levy 2009a; Altbach and Balán 2007). In contrast, the overwhelming majority of PHEIs globally are markedly non-elite, usually absorbing much of the demand for HE that is not accommodated by the public sector. As such institutions are so common, especially in the developing world, semi-elite institutions have a comparatively special status. Until now by far the most detailed exploration of semi-elite in one country,

⁸ Although for-profit PHEIs can fit the semi-elite definition, for-profit PHEIs are not present in the Polish HE system.

⁹ For the two prominent global rankings of universities (the London Times Higher Education Supplement World University Rankings and the Shanghai Jiao Tong Academic Ranking of World Universities), 63 universities make the top hundred in both rankings and 21 of those are private—but each of the 21 is a U.S. institution. 90 institutions make both the London top 200 and the Shanghai top 500, of which 44 are non-US and none of the 44 is private. The private non-U.S. institutions that appear as we look beneath the top are mostly European universities with ambiguous private-public status and a couple of Japanese private universities (Levy, 2009b).

Praphamontripong's (2010) on Thailand, finds that only- five out of the country's 67 PHEIs are semi-elite, though they hold some 40% of enrollment. Only three out of 60 Mexican PHEIs were identified as semi-elite in the large state of Nuevo Leon (Silas 2008).

But those studies accepted the high-status PHEIs as semi-elite. Our approach is different: we want to verify whether top-ranked PHEIs have semi-elite characterizes, without any a priori presumption that they are semi-elites.

3.2.2 Identifying the Top-ranked Polish PHEIs

I focus on Polish PHE institutions which besides fulfilling the first definitional characteristic of semi-elite (being private, which is clearly identified in the Poland HE national database) fulfill the second requirement of semi-elite--standing between elite and non-elite institutions. It is difficult to count more than perhaps two of even Poland's public universities as elite¹⁰. Certainly none of even Poland's leading private universities approaches global ranking. Instead, they lie below the nationally elite public institutions. We do not have to worry that any Polish PHEIs will fail to semi-elite because they are elite! Moreover as in most counties, so in Poland, the large majority of private institutions are markedly non-elite. They absorb much of the demand for HE that could not be accommodated by the public sector left from the communist era even as that sector has since grown (Jablecka 2007b). How then to eliminate such institutions that cannot satisfy the definitional requirement to be above non-elite? Fortunately, there are major national

¹⁰ The Jagiellonian University and Warsaw University, make the Shanghai ranking in the top 400. Besides being ranked by the world rankings, the Jagiellonian University is also ranked 133 out of 171 and the Warsaw University is ranked 134 in the regional European ranking on productivity and visibility of European universities (Ernst & Young Report 2009).

rankings of institutions, as will be elaborated below in our discussion of our pilot project and surveyed institutions.

3.2.3 Levy's Postulated Common Characteristics of Semi-elite

The definitional characteristics of semi-elite are joined to a set of what Levy takes to be "common characteristics" of semi-elite institutions. One might call them hypothesized characteristics but Levy does not pose them in any formalized way. He calls for case studies so that we can get a better idea of what characteristics are truly common and allows that some characteristic or other may prove to be ubiquitous even to the point of then being considered for inclusion in the definition of semi-elite. I proceed first to identify Levy's tentative set of common characteristics, along with his explanations and preliminary evidence from other case studies. Then I proceed to compose my own formal hypotheses for the Polish case, judging which of them are applicable or not or have to be changed in order to explore semi-elite in Polish HE.

Levy divides his common characteristics into two categories: what semi-elites do and how they operate. In fact, however there are large overlap between the what and the how and so I do not pursue that distinction. Common characteristics of semi-elite institutions would include comparatively high academic quality and serious attention to teaching while aspiring to be leading private institutions nationally. Moreover, semi-elites are economically oriented with international profiles and Western-orientations. In terms of students semi-elites are selective in admissions policy and are inclined to enroll students with high social class who can afford paying ample tuition. They are high in privateness in terms of finance, governance, and function (Levy, 2009; Levy 2010b).

Additionally they have common characteristics such as conservatism in an economic and/or political sense, entrepreneurism, and professional management. Each of major common characteristics of semi-elite may influence development of additional characteristics. For example, semi-elites' marked entrepreneurialism is visible in analyzing characteristics like fields of study, recruitment methods, teaching orientation, competition, and finance and management (Levy 2009b). The Mexican case shows that semi-elite institutions are very entrepreneurial via marketing of new programs and delivering modes and course scheduling (Silas 2008). The entrepreneurial nature of semielites can be linked with their investing money to develop and maintain facilities and academic infrastructure. According to Silas (2008), Mexican semi-elite institutions invest large amounts of money in keeping their facilities and academic infrastructure in good shape.

In this section I evaluate what Levy and the initial literature say about some of the matters Levy puts forth as common characteristics of semi-elite institutions but only those eight that I will formalize into hypotheses and analyze in my Polish case study. Choice of the eight has much to do with (a) which I could develop good indicators for, with data to match the indicators and (b) which could be effectively studies in both intersectoral and intrasectoral dimensions. These eight are Enrollment size, Primary function, Concentration of institutional offerings, Field subject matter, Student quality, Faculty quality, Sources of funding, and International orientation.

1. Enrollment size

After having supposed in his original formulation that semi-elite institutions tend to be small, related to their specialization, Levy reformulated in his revision. The reformulation

was influenced by hitherto the most thorough national study of this subsector, which indeed found these institutions to be much larger than average private ones (Praphamontripong 2010).

2. Primary function

It terms of functions, semi-elites focus on good teaching or training rather than on research but applied research can be a feature of semi-elite institutions (Levy 2009). In contrast to demand-absorbing institutors, they offer both bachelors and masters programs and even some may offer limited number of programs at the doctorate level (Musial-Demurat 2008).

3. Concentration of offerings

In terms of the number of offered programs the initially postulated characteristic, that semi-elites are largely niche institutions, was not supported by findings from the Thai and Mexican cases. Praphamontripong and Silas show that semi-elites offer programs in a rather wide range of fields. Mexican semi-elite institutions have comprehensive offerings which include a vast array of undergraduate and graduate programs in areas such as law, administrative sciences, engineering, education, humanities and health. Consequently, specialization was an original thought which has become vulnerable and thus dependent on whether further research shows a broad range of programs. This research project aims to help to explore the applicability of this hypothesized semi-elite characteristic to the Polish case.

4. Field subject matter

The teaching orientation of semi-elites presumably influences the fields of study offered by those institutions. Two characteristics of semi-elite—seriousness about teaching and

fields of studies-- overlap but whereas the first is about function, the second is about content, mostly of the teaching. Mostly semi-elites ostensibly focus on offering nonexpensive programs with special attention given to MBA programs. Related fields are management, accounting, tourism, and computer science (Levy 2009b). Semi-elites might be (compared to public institutions) specialized and restricted to certain fields—but less than demand-absorbing institutions. Overall, semi-elites are proclaimed to be successfully job-oriented with focus on the practical fields, propositions born out in the Thai and Mexican cases.

5. Student quality

After discussing the teaching nature of semi-elites and their fields of study I evaluate the student body. Levy (2009) postulates that semi-elite's common characteristics include a selective student body. In most countries, (excluding the US) the best public universities attract the most talented students who want to receive degrees from prestigious public institutions without having to pay tuition due to governmental subsidies for public sector. However, supporting Levy's view of a special private level at semi-elites, is empirical work by others (Silas 2008; Yonezawa 2007) including my own prior analysis of the Polish case (Musial-Demurat 2008) finding that semi-elites seek selective bodies of students as they compete to attract "near pinnacle students." This group is composed from students who either applied for and were not accepted to Polish public HE institutions or who, for some reason, did not apply for programs offered in public institutions. To continue their education, they apply for either second tier public institution or choose private ones. Semi-elite institutions try to be the alternative first choice for these students—"the first second choice. "For those who had not applied for

public institutions, one reason is that they believed they had little chance to be accepted to competitive public programs; another reason is that they are searching for some special aspects of educational programs that are not offered by the public institutions. Semi-elite institutions want to be the alternative first choice for students from the second group regardless of the reasons for their not applying for public institutions. In addition, institutions target the "near pinnacle" students because they are a group that has aspirations to receive degrees from reputable HE institutions regardless of whether it is public or private. According to Silas, for Mexican semi-elite institutions it is important to recruit "brilliant kids" who will keep up their good academic work. In order to attract those students, semi-elites need to have well developed recruitment programs. Silas research indicates that semi-elites are very active in recruiting through professional brochures, guided tours of the campus, and visits to top secondary schools. Similarly, my preliminary analysis of websites of Polish leading privates catalogues related recruitment activities.

6. Faculty quality

Being serious about providing a quality of education above the average privates requires having a good faculty body. As most privates, semi-elites have to hire part-time faculty to minimize the costs but at the same time Levy postulates that they will have higher number of full-timers than average private institutions. Also, The Mexican case shows that semi-elites are willing to invest in their individual faculty already on staff, to enhance skills.

7. Sources of funding

Levy makes several concrete observations about common financial patterns at semi-elite institutions (some about financial source). Like most private institutions outside the US, semi-elites are tuition dependent and to survive in competitive markets they follow the professional finance. Usually, their tuitions and fees are higher than those charged by average private institutions due to semi-elite's higher status and privileged student body. Although tuitions are the major source of semi-elite income, there tend to be more diverse sources of revenue than seen at average private institutions. The Thai case shows that semi-elites earn some income from other sources but nevertheless they are still mostly tuition dependent.

8. International orientation

Semi-elites, again according to Levy, tend to be internationally oriented, especially Western-oriented, even U.S. oriented. This trend is visible via partnership programs between semi-elite and foreign HEIs as well as via exchange programs and lectures in foreign languages.

3.2.4 Eight Semi-elite Hypotheses for the Polish Case

In this section, I identify which ostensibly common characteristics of semi-elite discussed by Levy in his revised formulation (Levy 2009b) can be tested by me for the Polish topranked private institutions. Some characteristics will be discussed in depth while others will be briefly analyzed or revised for the Polish case.

All of the common characteristics are important but only for some characteristics can I conjure up suitable indicators or find enough Polish metrics to test the applicability of those characteristics to the Polish case. Thus I analyze eight proposed common characteristics of semi-elites: Enrollment size, Primary function, Concentration of institutional offerings, Field subject matter, Student quality, Faculty quality, Sources of funding, and International orientation.

1. Enrollment size

Based on the revised version of the semi-elite formulation I hypothesize that Polish topranked PHEIs are larger than average PHEIs. And I strengthen the hypothesis in expectation that not only are there intrasectoral differences but that they are strong in magnitude such that top-ranked PHEIs are much larger than average PHEIs.

2. Primary function

Accordingly, I hypothesize that top-ranked privates mainly focus on teaching and training and have limited research activities. However, I also hypothesize that the top-ranked PHEIs, compared to average PHEIs, place a lot of effort on quality of teaching and additionally are more involved in research.

3. Concentration of offerings

I hypothesize that top-ranked Polish private institutions offer a relatively limited number of programs and specializations in comparison to comprehensive public universities but offer more programs than demand-absorbing institutions. The survey should help verify how many programs leading institutions have the right to offer. Accordingly, my formal hypothesis is that top-ranked Polish private institutions are less concentrated in program offerings than are average PHEIs.

4. Field subject matter

To the extent that chapter 4 verifies a major private-public contrast in field subject matter, my pursuit in parallel form for the intrasectoral analysis in chapter 5 would be to explore where top-ranked privates might fall on that spectrum. I believe that the top-

ranked institutions are less restricted to only inexpensive fields although still mostly giving them. I thus hypothesize that top-ranked Polish PHEIs fields of study are mostly like the fields of the private sector overall but also get more enrollment into fields that are unconventional in the private sector. In effect, this hypothesis has two parts.

5. Student quality

Despite the fact that it is not easy to directly verify the qualifications of the students that enter programs offered by leading PHEIs due to a lack of Polish data on entrance requirements. I hypothesize that Polish top-ranked PHEIs have the semi-elite characteristic of a relatively high quality student body which differentiates them from average PHEIs.

6. Faculty quality

In order to show that top-ranked private institutions are serious about providing quality education, they have to pay attention to their faculty body. Thus I hypothesize that there are intrasectoral differences in faculty quality in the private HE sector with faculty quality being higher in the top-ranked PHEIs than in the average PHEIs.

7. Sources of funding

I hypothesize that top-ranked PHEIs, in accord Levy's ideas, generate most of their revenue from tuitions and fees but have more diverse sources of finance than average PHEIs. Thus this is one of my hypotheses with two explicit parts. I first analyze the similarities between top-ranked PHEIs and the private sector and then differences between the two groups.

8. International orientation

Literature on semi-elite institutions suggests that semi-elites try to present themselves as internationally oriented organizations. That is partly because the quality of HE institutions is often measured by ability to attract international students. My initial impression is that Polish top-ranked private institutions resemble other private institutions in being usually Western-oriented and U.S. oriented.

I hypothesize that Polish top ranked private institutions are more internationally oriented than average privates--and perhaps more than average publics. In order to support my hypothesis I plan to measure whether Polish top-ranked privates have more foreign students than average private or public institutions. In addition, some other factors like the number of agreements/partnerships with foreign institutions and therein creation of opportunities to establish joint degrees and exchange programs will be measured to verify whether top-ranked Polish HEIs provide foreign modes of education.

3.3 Analyzing Top-ranked PHEIs:

3.3.1 Pilot Test of Survey

The pilot test mirrored in content and length the final dissertation survey. I sent invitations for participation in the pilot test to five institutions, but then removed one at Dr. Kwiek's suggestion (see shortly below on why) and replaced it with another topranked PHEI. Out of five invitees three top-ranked PHEIs completed the pilot survey.

The main goal of the pilot survey was to make sure that institutions correctly interpret my questions and reply to all (or nearly all) of them. The pilot sought to be sure that I had no misleading questions or questions that institutions were generally not willing or able to answer. Overall, I found little reason to make many changes and I was

able to keep the survey enough intact so that I could count my pilot responses together with my subsequent responses.

The institutions selected for the pilot test were chosen as representatives of the final population. My final population was assumed to be the approximately 20 top-ranked Polish PHEIs. Thus the decision was made that the pilot test should include some of the highest ones but also some from the 10-20th places in the rankings. The selected five institutions all make the rankings of all three major ranking systems: Rzeczpospolita, Wprost and Polityka. In addition, these four institutions have kept their relative standing in the rankings over the last three years.

The decision was made to not send the pilot test to one particular very salient Polish PHE, because its responses would be crucial for the dissertation project and we did not want to risk getting responses by it only to the pilot. Moreover, the decision was made, as noted per Dr. Kwiek's suggest, not to contact the Akademia Humanistyczno-Ekonomiczna w Lodzi, which was ranked 5th by Rzeczpospolita 2008 due to the controversial stories about the institution in the Polish press in summer and fall 2009.

3.3.2 Survey

Surveys distributed to top-ranked PHEIs constitute the second source of data for this project. My focus is toward gathering and then evaluating data on individual top-ranked Polish PHE institutions. Thus the survey (Appendix 1 and 2) was used to collect data from these PHE institutions. The purpose of the survey is to help better understand the characteristics of top-ranked PHEIs and, based on the survey data, evaluate how well they match the description of semi-elite institutions (Levy 2009b; Praphamontripong 2010). The central aspect of part 2 of the study is to use the survey data to analyze how

much the top-private institutions differ from average private (and sometimes public institutions) and how many definitional and hypothesized characteristics of semi-elite institutions they have. Even prior to those findings, one of the major goals of the project is to translate definitional and hypothesized semi-elite characteristics to hypotheses and indicators for the Polish case.

Consequently, it is important to do this survey in order to collect detailed information about top-ranked Polish PHE institutions. The Polish national databases like GUS (Central Statistical Office of Poland) do not include detailed information about individual institutions; rather, data about groups. Data are gathered from institutions but shown only by sector (public and private), not by institution (i.e., enrollment in private institutions versus enrollment in public institutions).

All PHE institutions (over 300 colleges) are combined in one group or a few subgroups such as regional groups or types groups like agriculture colleges. No differences between individual institutions are presented. The survey, combined with an analysis of data on the entire private sector, is crucial investigate if there are substantial differences among private institutions in Poland.

Thus the survey was sent to fifteen PHEIs from which six filled out the survey. Additionally, three pilot surveys were combined with these six surveys and therefore the final group includes responses from nine top-ranked PHEIs.

The special GUS (GUSb; GUSc) report provides some data by individual institutions excluding, for example, data on finance. For some of my analyses in chapter 5, I select certain data from the special GUS report for the 20 top-ranked PHEIs.

The decision regarding which information to compare is based on two principal criteria:

- "Semi-Elite" characteristics as put forth in the pioneering literature on semi-elite (Levy 2008c; Praphamontripong 2010; Musial-Demurat 2008).
- What seems likely that institutions are capable and willing to respond about this criterion is verified by sending a pilot test and evaluating which questions were or were not answered by the pilot institutions (more information about the pilot test can be found in Chapter 3 under subtitle Pilot Test).

3.3.3 Interviews

Ten interviews with Polish HE specialists were conducted in order to verify, probe and elaborate on the data collected through surveys and from the Polish national HE database. The interviews were based on open-ended questions and lasted from one to one and a half hours. The interviews were used to discuss in depth intersectoral and especially intrasectoral differences in Polish HEIs with focus given to the top-ranked PHEIs.

3.4 Selection of Data Sources

3.4.1 Selection of Databases (mainly for Private-Public Comparisons)

National Database

Data published in the Polish national database, GUS (GUSd), are used for gathered general information about private and public HE sectors in Poland. There are weighty reasons why the national data will be used for this project.

First, GUS is the only published source of data on private and public sectors that can be used to evaluate degrees of differences between private and public sectors in Poland. I hypothesize that the two sectors (public and private) are very different and along the lines of leading research on PHE globally.

Second, the private and public sectoral averages included in GUS database are used to show how top-ranked Polish PHE institutions differ from private and public sectors in this study. I hypothesize that the top-ranked private institutions are usually between average private and average public. GUS is the major published source of data on private and public averages. It is used not only to compare those averages (for intersectoral purposes) but also to compare with data gathered from selected top-ranked PHEIs via survey and interviews (for intrasectoral analysis). In addition to the aforementioned data, also included are indicators that can be classified as part of the definitional and distinctive characteristics of semi-elite institutions. Consequently, the same data collected via survey from the top-ranked PHE institutions can be compared with the data published for public and private.

Description of parts of GUS database

The Social Survey Division of GUS is responsible for preparation of the annual publication called "Higher Education Institutions (Schools) and their Finances." The publication includes reported data derived from surveys covering all types of HE institutions (schools) and research institutes regardless of their organizational and property structures. The first part of tables presents information concerning students, graduates, university lecturers, PhD studies, post-graduate studies, scholarships, and conferment of PhDs and other degrees. The second part of tables includes information on finances of the HE institutions.

3.4.2 Selection of PHEIs and Interviewees

Selection of PHEIs

Twenty institutions that are the highest ranked on the private side are surveyed along the lines of the literature's hypothesized common characteristics of semi-elite. The selection of the institutions is drawn from the Polish national ranking developed and published by the Rzeczpospolita/Perspektywy Ranking. This annual ranking is nationally well-known, providing information about evaluation and assessment of the quality of education offered by Polish colleges and universities. Ranking committees evaluate aspects of teaching, research, service, and student achievements. Specific areas evaluated include qualifications and research productivity of the faculty, funding for research and facilities such as libraries and informational technology facilities, and student services. The large number of factors that is taken into consideration during preparing the ranking ensures that many institutions' activities are evaluated and allows for consistency of ranking. These factors also allow for stable ranking. The choice of the Rzeczpospolita ranking follows analysis of the websites of sixteen top-ranked PHE institutions; that analysis verified which national HE rankings are cited the most often by Polish private colleges. Rzeczpospolita was the most often cited (slightly ahead the Wprost ranking).

Reasons for Choosing the "Perspektywy & Rzeczpospolita" Ranking

These are the reasons I selected the "Perspektywy & Rzeczpospolita" ranking, the ranking I use for identifying the top 20 PHE institutions:

1) "Perspektywy & Rzeczpospolita" annually prepare and publish, among other rankings, the ranking of HE institutions in Poland. This ranking is nationally

well-known, providing information about evaluation and assessment of the quality of education offered by Polish colleges and universities.

- The ranking "Rzeczpospolita" was listed among four other rankings (Wprost, Polityka, and Newsweek).
- 3) "Rzeczpospolita" provides four major rankings of HE institutions: 1. best academic colleges (private and public together), 2 & 3. Master and Bachelor private colleges separately, and 4. a list of vocational public schools. In addition, "Rzeczpospolita" presents seven rankings of schools by types of offered programs including universities, for example, the ranking of the best universities includes 24 private and public universities, the ranking of the best technical schools includes 23 colleges private and public, etc.

Although the Wprost ranking also includes classifications of institutions by types such as private/public, type of offered programs, and one program level ranking that includes a list of colleges that offer the best MBA program, Wprost ranks private institutions in two categories--business and non-business schools--- instead of Master and Bachelor colleges. This important difference between Wprost and Rzeczpospolita rankings is crucial in my decision to use Rzeczpospolita for selecting institutions for the dissertation project. That is because my project focuses on top private institutions and the assumption is made that top-ranked private institutions need to offer Master programs. Consequently, the Rzeczpospolita ranking, which provides the opportunity to compare standing of colleges that offer Master programs, is more appropriate for my research project than is the Wprost ranking.

In contrast to the Rzeczpospolita ranking, Polityka does not provide the separate ranking of the best private institutions. The Polityka ranking includes only classification of institutions by type of offered programs--seven categories (public and private together), for example, economy-marketing, law schools etc.

Similarly, Newsweek does not provide ranking of the best private colleges; rather it focuses on views of jobs gained and lumps private and public institutions.

4) Rzeczpospolita does not give the same rank number to more than one institution so there are no institutions that have the same places. In contrast, Wprost gives the same ranking scores to some institutions so more than one institution can have the same particular place in the ranking.

I analyzed the websites of sixteen top-ranked PHE institutions to see which national HE rankings are cited the most often by private colleges in Poland. I randomly selected ten institutions from the Rzeczpospolita ranking 2008 from places between one and twenty. Similarly, ten institutions ranked number one by Wprost ranking (2007), five private business schools and five private non-business schools were selected for the analysis. Four schools were repeated in both rankings so the final pool of institutions includes sixteen schools. (Only four schools were repeated because Wprost has rankings for private business and non-business schools whereas Rzeczpospolita has rankings on private Master colleges without dividing business and non-business schools.)

Interview Information

The ten participants for the interviews were selected after consultation with Polish national expert Dr. Marek Kwiek (a member of my committee). The people interviewed included presidents of top-ranked private colleges, ex-presidents, scholars, and Fulbright and accreditation representatives.

3.5 Data Analyses

3.5.1 Introduction

This study is based on analyses of GUS data, survey data and interviews, all firmly developed within conceptual, global scholarship on PHE. The analytical problem is twofold because the study attempts to analyze the private-public differences in HE and then explores intrasectoral differences, trying to discover whether Polish top-ranked HE institutions have hypothesized characteristics of semi-elite institutions.

3.5.2 Intersectoral Analyses

I select the private-public indicators for eight intersectoral hypotheses which are tested in chapter 4. I present direct data on one hypothesis (on Enrollment size) as the GUS national database on enrollment directly shows size. But for all other hypotheses, what I want to gauge is a concept, for which there is no pure statistical representation. So I developed for these hypotheses indirect indicators and I selected data for the indicators. For all eight hypotheses, I use quantitative data. I supplement this, GUS and other data are limited, with interviews with experts as well as of course with pertinent literature

3.5.3 Intrasectoral Analyses

Similarly for intrasectoral analyses, I present data without need of any invented indicator on just one hypothesis, that on enrollment size, but for all other hypotheses what I want to gauge is a concept, for which there is no pure statistical representation. Thus I selected indirect indicators for these hypotheses. For each indicator I provide data. For all eight hypotheses, I use quantitative data. I complement this with interviews with experts. The survey is used to collect data from top-ranked PHEIs.

The responses from the survey for almost each indicator are matched with the data gathered from the GUS database on private averages and sometimes on public averages. All responses from the surveyed top-ranked PHEIs are combined and compared as a group with overall private averages. For example, the average number fields in which programs are offered by the nine surveyed top-ranked PHEIs is compared to the average number of fields in which programs are offered on average by PHEIs.

3.5.4 Descriptive Statistics

Relevant statistical analyses are used (in both the intersectoral and intrasectoral analyses), such as basic descriptive statistical facts and figures. The descriptive analyses such as percentages and frequency distributions are calculated. Those results from top-ranked PHEIs are compared with results received from analyses done on the private sector and in some cases on public sectors.

The GUS database provides raw data for the whole sectors (private and public) or some data for individual institutions (public or private HEIs). For my analyses, I calculate averages/percentages for the private or public sectors, and averages/percentages for my surveyed group of top-ranked institutions.

The analytical methods used in this study are not designed to analyze statistical significances between intersectoral and intrasectoral differences. That is because for intersectoral analyses GUS provides aggravated data, not raw data¹¹, and for intrasectoral

¹¹ GUS provides aggregated data for private and public sectors, not raw data on institutions. Thus I cannot calculate standard deviations for the private and the public sectors. The special GUS report provides

analyses I have a small sample size--only nine top-ranked PHEIs. Thus statistical tests are insignificant for these cases. Only for the total number of students do I provide a standard deviation, as raw data are available for all private and all public HEIs.

3.5.5 Interviews

As an additional source of information, interviews play a more prominent role in chapter 5 than they did in chapter 4. In many cases, the statements of interviewees likely capture at least efforts made by top-ranked institutions. However, readers of course have liberty to weigh the interview information as they judge suitable. The statements of experts are informed views not necessarily based on hard numbers so, even where we might take them as honest, they are not reliable substitutes for quantitative data. Thus interview statements are limited as far as being objectively factual.

3.6 Methodology Limitations

Beyond the limitations in the research scope discussed in chapter 1, several other limitations are more specifically methodological and they too pose challenges to generalizing the findings of this research to broader contexts.

Regarding the intersectoral work, I am heavily reliant on the GUS national database but it does not provide private-public breakdowns on all matters even where it has system data. Inclusion of more private-public indicators would have allowed more hypotheses to be probed and would have allowed for more indicators on the hypotheses I do probe. However, due to limitations of access to data on some of the characteristics of PHEIs and public HEIs as well as their students and faculty bodies, the study focuses on

some raw data for all private and/or all public institutions but the format in which data are provided makes extraction of raw data very complicated.

only some indicators (omitting indicators for which data are not accessible). In most cases data do exist but they are collected by individual institutions and are not publicly shared or centralized by the government. For example, evaluation of quality of students enrolled in PHEIs and public HEIs could be strengthened if we had data on entry requirements centrally collected in Poland. Additionally, data on SES background of students or on research productivity of faculty are also not available to researchers. These data would be the best indicators for evaluating hypotheses on differences in Student quality and Faculty quality between public and private sectors.

Due to resource, measurement, and other constraints, the study focuses on only some important semi-elite characteristics discussed in the literature and others are not examined and not translated into observable indicators in this study. In other words, several of the postulated characteristics of semi-elite are not engaged by any of my eight formalized hypotheses; for example, the professional management characteristic. Furthermore, even where I could identify indicators, some could not be fueled with pertinent data for the Polish case. My indicators do not always cover the breadth of the hypothesis in question. For example, even the nine top-ranked PHEIs that willingly participated in my survey are reluctant to provide financial information about their institutions; most institutions did not respond to the survey question about per capital spending per student. Thus I cannot compare financial efficiency of top-ranked versus typical PHEIs in Poland. This research does not fully examine all semi-elite characteristics and their presence or absence among top-ranked PHEIs in Poland. Therefore, the findings are limited in helping answer the question how much Polish topranked PHEIs fit hypothesized semi-elite characteristics.

The next methodology limitation of the study is related to the number of topranked PHEIs that participated in the survey. The original design of the study included the 20 top-ranked PHEIs as a sample of potential PHEIs that could have semi-elite characteristics.

Although the survey was sent to all 20 PHEIs, only nine institutions provided necessary data and so only they are included in analyses of intrasectoral differences within the private sector in chapter 5. This response size makes generalization of findings limited. The special GUS Report provides some data for the 20 PHEIs¹² which are also part of the analyses in chapter 5 but they are limited to certain data excluding, for example, most finance data.

Additionally, this intrasectoral analysis is limited to just one of the three principal PHE subsectors commonly referred to in the global literature. The research is heavily focused on the top-ranked PHEIs; inclusion of other private institution would strengthen the generalization of the findings particularly in the area of private diversification.

Furthermore, due to resource and other constraints, the number of interviewees is limited to 10 people including presidents of private colleges, ex-presidents, faculty members, scholars, and government representatives. Although interviewees represent the broad spectrum of HE specialties the focus of interviews was given to intrasectoral differences within the private sector with emphasis on characteristics of top-ranked PHEIs. Thus findings from the interviews are extensively used in chapter 5 of the dissertation and only to a certain degree in chapter 4. Inclusion of public university leaders would strengthen the generalization of the findings particularly in the areas of

¹² I verified ranking of 20 top-ranked PHEIs and extracted data from the special GUS report for these institutions.

private-public comparison. Despite the significance of this study on the or one of the largest PHE sectors in Europe (depending on how we measure) and despite the literature review's demonstration that there are substantial PHE commonalities in much of Eastern Europe—we cannot simply generalize the findings to the region.

Chapter 4 : Intersectoral Distinctiveness

4.1 Introduction

The major original findings of this dissertation are presented in this chapter and the following one. This chapter presents and discusses the intersectoral distinctiveness of Polish higher education, answering how Polish PHEIs differ from the public ones. I hypothesized (in the prior chapter) that the private and public sectors are very different from one another in Poland. This hypothesis has a dual nature because it is a hypothesis of "how much" different (very) and "how" (e.g., enrollment size, program offerings).

Eight private-public hypotheses form the core of this chapter. Keeping in mind the key assertion in chapter 3 that the global PHE literature does not formulate explicit hypotheses, I have for chapter 4 used its claimed findings to generate specific hypothesis about Polish intersectoral differences. My overarching hypothesis for this chapter is that intersectoral distinctiveness is widespread and strong in Polish higher education.

The hypothesis on each factor considers essentially what the literature has claimed to find; indicators and data are then selected to test my specific hypothesis within my overarching hypothesis that intersectoral distinctions are strong in Polish higher education.

The eight specific hypotheses within this overarching hypothesis deal with the following:

- Enrollment size
- Primary function
- Field subject matter
- Concentration of institutional offerings

- Student quality
- Faculty quality
- Funding sources
- International orientation.

Whereas the hypotheses and explanations about the hypotheses were presented in chapter 3, in chapter 4 I re-state the hypothesis for each factor and provide for each the pertinent global, regional, and Polish literature review. I present direct data on one hypothesis - Enrollment size. But for all other hypotheses, what I want to gauge is a concept, for which there is no pure statistical representation. So we need to select or develop indicators (or we could call them indirect indicators) of the reality in question. Some indicators have been already discussed in the PHE literature. Others are new indicators not yet used in other PHE research— though sometimes appropriated from the more general higher education literature-- and certainly not used for Polish PHE case.

For all eight hypotheses, I use quantitative data. I supplement this, especially where I lack adequate GUS or other data, with interviews with experts as well as with pertinent literature. Thus, as on Student quality, I often combine gauges. For the most part, the interviews are an additional source of information to the qualitative analysis. Readers of course have more liberty to weigh the interview information as they judge suitable. The statements of experts are informed views not necessarily based on hard numbers so they are not fully reliable substitutes for quantitative data.

The literature presented in chapter 4 does not unduly overlap with the literature review in chapter 2 or the introduction to global literature, regional, and Polish literature on PHE in chapter 1. That is because I focused on a general overview in chapter 1 and a sweeping literature review in chapter 2 whereas in chapter 4 the review concentrates on evaluation of research related to each individual hypothesis. Typically, the treatment of PHE in Eastern Europe and in Polish literature is descriptive and only sporadically makes explicitly designed intersectoral comparisons. Even in the global literature it is only a few leading works that are exceptions to the reality that pieces usually make ad hoc observations on PHE.

The uniform layout for each hypothesis continues from the pertinent literature reviews to my findings. These findings come principally from analysis of the Polish national database, GUS, and qualitative information principally from face-to-face interviews. Various publications and institutions' websites are supplementary sources. Taken together these sources lead to my major findings about significant intersectoral differences. These findings are intertwined with analytical discussions, again for each of the eight hypotheses, to better understand the differences, as well as some similarities, between PHEIs and public HEIs. For the first seven matters considered, the hypotheses could be considered "favorable" to the public sector in terms of conventional academic beliefs.

4.2 Enrollment size

Based on PHE literature, I hypothesized that Polish PHEIs are smaller on average than are Polish public HEIs. I hypothesized further that this is the case for the situation that can be captured in the very recent data (the data I use). And I strengthen the hypothesis in expectation that not only are there intersectoral differences but that they are strong in magnitude such that PHEIs are much smaller than public HEIs.

4.2.1 Literature

4.2.1.1 Global Context

The global literature on PHE suggests that average PHEIs are smaller than public HEIs. Indeed, this original Levy suggestion has been found repeatedly, in many different country settings, over time. We can now confirm it further with the latest and best global data. Analyzing PROPHE's international database on 117 countries we compare enrollment share to institutional share. On average private sectors enroll 31% of total students but the private share of total HEIs is over 55%. Admittedly, on the institutional side the data are much less complete but the magnitude of the enrollment-institution gap is compelling. Whereas in only 18% (18/97) of reported country cases privates hold the majority of enrollment, in 62% (53/86) of reported country cases, they hold the majority of institutions¹³. Globally, it is clear that average PHEIs are smaller than average public HEIs.

4.2.1.2 Regional Context

In the context of regional literature, the findings are consistent with previous analyses of the higher education sectors in Eastern Europe that indicate that the PHEIs are generally considerably smaller than most public counterparts (Fried, Glass, and Baumgartl 2007). Similarly, Kwiek (2008) reports that the European Universities for Entrepreneurship - their Role in the Europe of Knowledge (EUEREK) case study of private institutions¹⁴ shows that most institutions from Eastern Europe are very small or relatively small

¹³ The denominator for enrollment and institution fractions is not the same because for some countries PROPHE database presents data only on enrollment or only on a number of institutions.

¹⁴ The EUEREK case studies of private institutions included: the University of Buckingham (UK), Jönköping University (Sweden), TCUM – Trade Cooperative University of Moldova (Moldova), UCH – the Cardenal Herrera University (Spain), WSHIG – the Academy of Hotel Management (Poland), and the University of Pereslavl (Russia) (Kwiek, 2008).

institutions within respective national higher education systems. This argument can in fact now be supported by analysis of the latest PROPHE Europe database. It shows HE enrollment versus institutional shares in Europe, country by country. Private sectors enroll 16% of students but the private share of total HEIs is 26%. These percentages include almost all European countries and include "government-dependent" private institutions¹⁵; if we limit analysis only to "independent private" institutions, then the private enrollment decreases to 13% whereas the private share of total HEIs slightly decreases to 25%.

We have been able to update and reinforce the regional and global literature about the comparatively small size of private institutions. We thereby strengthen the context in which to evaluate our latest data from Poland, data which show intersectoral contrasts even much greater than those seen for the region and the world. The low average enrollment in PHEIs has been visible through the years in Poland. Thus, Duczmal (2006) reported that the average student number enrolled in private providers was close to only 2000 through years 1998-2005¹⁶. The findings are also consistent with the more recent data reported in the Ernst and Young report (2009) for year 2008.

¹⁵ As PROPHE notes: "For several West European countries, there is great ambiguity on what is private. The OECD and Eurydice databases refer clearly enough to public institutions and to independent private institutions but also to government-dependent private institutions. Government-dependent private institutions are legally private, and administered by non-government agencies such as churches, businesses, trade unions, or other bodies, they are not normally seen as private within the country. Only the independent privates are. According to both databases, the difference between independent private institutions and government-dependent private institutions lies in the degree of core funding a private institution gets from government. If an institution receives 50% or more of its core funding from the government, it is considered government-dependent; in turn, if an institution receives less than 50% of its core funding from the government, it is counted an independent private institution" (Info from PROPHE website http://www.albany.edu/dept/eaps/prophe/data/data.html).

¹⁶ Jablecka (2007a) implies that PHEIs are smaller than public institutions while analyzing legitimacy in Polish higher education sector, though without data. In a separate piece, Jablecka (2007b) presents GUS data 2004/5 on enrollment and number of institutions in public/private sectors without explicitly discussing the differences between two sectors.

4.2.2 Findings

For this hypothesis I have two measures but they are not truly indicators of an abstract concept, unlike the case for the ensuing seven hypotheses of the chapter. This is an exceptional hypothesis of the eight in that I have direct measurement since enrollment is a concrete matter, not a concept.

The stated hypothesis about the enrollment size adequately measures differences between the two sectors. However, it is important to note for the Polish case that total enrollment is presented in the GUS database without differentiation between part-time and full-time students. That is why I analyze the student full-time equivalent (FTE) after I present the GUS enrollment data. Additionally, the distribution of the full-time and parttime students in both sectors is analyzed in the Student Quality section of this chapter which immediately follows this section on size.

There are 461 higher education institutions in Poland (academic year 2009/2010). Of these, 131 institutions are public, educating 67% of students (1.2 million) and 330 are private, educating 33% of students (633 thousand). We see that there are both intersectoral and intrasectoral differences between and within private and public sectors. The public sector has institutions that on average enroll many more students than PHEIs. The average number of students in public HEI is 9,150 whereas the average in PHEI is 1,900. Thus, the intersectoral realities for enrollment and institutions are nearly mirror images: the public sector accounting for two thirds of enrollment, the private sector for two thirds of institutions. On average public HEIs have four times more students than PHEIs. In short, not only do the latest Polish data confirm previously Polish intersectoral differences, they strongly support the hypothesis of major differences. Those differences

are huge. Not only are Polish PHEIs on average much smaller than public ones but the difference is much more marked than even in the stark regional and global intersectoral contrasts, as table 2 portrays.

Polish HE Sectors	Number of Institutions	%	Total Enrollment	%	Average Enrollment per Institution
Public	131	28.4%	1,266,917	66.7%	9,671
Private	330	71.6%	633,097	33.3%	1,918
Total	461	100%	1,900,014	100%	
Source: Author's	calculations GI	IS 2009			

 Table 2. Enrollment Data by Public and Private Sectors in Academic Year 2009/2010

Source: Author's calculations GUS 2009

As already suggested, however, it remains important to be aware that there is notable intrasectoral diversity of sizes as well (Duczmal 2006; Levy 1992). The smallest Polish PHEI has an enrollment below 50 whereas the largest PHEI has an enrollment over 35,000. Overall, seven PHEIs (excluding the Lublin University) have an enrollment over 10,000, the rest of them on average have an enrollment below 5,000. The smallest Polish public HEI has an enrollment slightly over 100 students whereas the largest public institution has an enrollment over 55,000 (special GUS Report 2007).

But even though data on individual institutions show notable intrasectoral variation, they also dramatize the over-riding intersectoral contrast. Seventeen PHEIs have an enrollment below 100, nine of them religious institutions, mostly seminaries representing various denominations (author's own calculations based on special GUS report 2007). In contrast, none of the public HEIs has enrollment below 100. Seventeen public HEIs out of 131 (13%) have enrollment over 20,000; in contrast, only one PHEI, the University of Humanities and Economics in Lodz out of 330 (0.3%) has enrolment over 20,000 (own calculations based on special GUS report 2007).

As mentioned above, the GUS database includes the total enrollments for both sectors without taking into consideration the percentages of full-timers and part-timers. Accordingly, I decided to calculate student full-time equivalent (FTE) for both sectors to further evaluate possible differences in enrollment. Student FTE for the public sector equals 1,047,452 and for the private sector 371,683¹⁷. Thus the public sector has over three times the FTE of the private sector. In other words, while counting all students together the intersectoral enrollment contrast is 2:1, in counting FTEs it is 3:1. Of course the intersectoral institutional contrast remains 2:1 in the opposite direction (more private than public). In short, the sector with roughly two-thirds of the institutions has only a quarter of the FTE. Private institutions are indeed much smaller on average than their public counterparts.

4.2.3 Conclusion

The findings illustrate two important but inter-related differences between the private and public HE sectors in Poland. First, overall the private sector is much smaller than the public sector in terms of enrollment whereas it has many more HE institutions than does the public sector. Consequently, second, Polish PHEIs are much smaller on average than are Polish public HEIs. As these findings echo both the global and regional literatures'

findings about institutional size, they strongly support our hypothesis that Poland's average institutional size would be much smaller in the private than in the public sector.

4.3 Primary function

I hypothesized in chapter 3 that there are sharp intersectoral differences in primary function between private and public HE sectors in Poland. The PHE sector focuses on

¹⁷ In order to calculate FTE for part-time students the number of part-timers in each sector was divided in two.

teaching and training and is far behind public HE sector in terms of research. Focusing on teaching may be a positive choice of a main mission by at least some of the academically serious PHEIs.

4.3.1 Literature

4.3.1.1 Global Context

Global analysis shows that research and expensive facilities are rarely found in privates outside the US (Levy 1992; Levy 2007; Levy 2008c) Most PHEIs focus on teaching and training rather than on conducting research (which in most cases requires substantial amounts of funding and advanced faculty and student bodies). In most cases PHEIs are not subsidized by governments and are heavily dependent on student fees. Consequently, many of them cannot afford funding expensive research facilities and investing in research due to limited (and uncertain) revenues. Additionally, conducting research is heavily dependent on faculty who generally prefer to work in prestigious public HEIs which offer status, top colleagues, top students, security of employment and access to research facilities. Consequently, even when they want to attract top scholars, which is rarely, PHEIs have problems (outside the US). Finally, academically qualified and motivated students, particularly graduate students, are important elements of successful research conducted at HEIs. But the private sector suffers all sorts of comparative disadvantages in competing for such students, not least of all offering only paid fee programs.

The readiness to conduct research is also related with ability to offer fields of study that are strongly linked to research activities. In terms of fields of study, global literature indicates that PHEIs specialization is overwhelmingly in inexpensive fields, commercially centered programs, with much less than publics in exact science fields

(Levy 1992, 2002). In contrast, public universities often offer (besides inexpensive programs) expensive programs in core science fields which require well-developed research facilities, high quality faculty members and talented student bodies.

4.3.1.2 Regional Context

"In Central and East European transition countries, educational business is increasingly private, teaching-focused and market-driven" (Kwiek 2007) . Most PHEIs which are fully dependent on tuitions and fees are not able compete with public universities for public research funds in the region. Rather they mostly focus on teaching and do not carry out almost any accompanying research. Similarly, Fried, Glass, and Baumgartl (2007) emphasize that one of the differences between public and private higher education in Europe lies in the main roles of both sectors; PHEIs usually maintain focus on teaching, while public HEIs lay claim to the bulk of academic research.

4.3.1.3 Poland Literature

A lack of research orientation among Polish PHEIs is mentioned in the national literature (Jablecka 2007a; Jablecka 2007b). Kwiek (2009a) emphasizes that the private sector is almost fully a teaching sector and for most PHEIs research is a marginal activity both in terms of academic mission and in terms of sources of funding. That's because the total costs of university research are high and escalating (Kwiek 2009b) and most of the PHEIs cannot afford expensive research facilities. In addition, Polish law allows privates to only receive governmental funds for research from competitive grants with tight requirements which cannot be met by most PHEIs. Consequently, most of the governmental research funds are used by public universities and only a marginal percent is allocated on research in PHEIs as data shown below. A lack of research activities in most privates can also be

related with their academic mission. Most of the PHEIs are small teaching oriented institutions which offer only bachelor's degrees in a limited number of fields or offer predominantly MBA programs as in case of business schools.

4.3.2 Findings

This study evaluates the primary function of HE sectors that has been prominent in PHE literature from the outset and shown to reveal stark private-public contrasts (Levy 1986). My hypothesis about the differences between primary functions between public and PHEIS is tested through analyzing financial indicators related to research activities and evaluation of enrollment in three core science academic disciplines (life sciences, physical sciences, and mathematics). The quantitative findings are further supported by qualitative findings based on the expert testimony in interviews about the primary function of PHEIs and public HEIs.

Overall, the indicators used in this research for analyzing the hypothesis are helpful but limited. They could be expanded based on what the higher education literature often uses. Indicators like number of publications or extent of research facilities would ideally be used to measure an institution's involvement in research. Moreover, evaluation of mission statements of PHEIs and public HEIs could help shed light on primary functions of these institutions. Similarly, in-depth analysis of the offered programs could help to show whether, as globally found, the PHEIs tend to be more focused on teaching and training via offering market oriented programs with practical curriculum whereas the public HEIs are in general responsible for research development.

4.3.2.1 Financial Indicators

Financial indicators help to show the weight of research in private and public sectors. Generally, HEIs which have substantial research funding conduct more research than institutions with limited research funding. In addition, different fields of study require different degrees of research activities. Core science fields are more profoundly research tied than are most other fields. Offering core science fields indicates, albeit indirectly, research orientation of an institution.

The pertinent financial findings support the hypothesis, which is unsurprising given how often the reality has been shown in non-Polish contexts and even in Poland. But our findings come in astonishing degree. Of the total HE income from research activities¹⁸ 98% is in public HEIs. Only 2% of the total HE income from research activities is in the PHEIs, though they educate 33% of students.

Polish HE Sectors	Percent of Income from
	Research Activities
Private	2.3%
Public	97.7%
Total (both sectors)	100.0%
0.000 0110 0000	

Table 3. Total Income from Research Activities by Sector

Source: GUS 2009

Table 3 shows the huge intersectoral financial distinction on research, and a detailed analysis of research funds is presented in the Source of Funding hypothesis described in this chapter.

The analysis of operating activity incomes (including as above all sources of income such as governmental funds, charges from tuitions etc.,) generated by each sector is presented in table 4. These data present even further evidence of differences between sectors in terms of income sources. For public HEIs teaching provides 80% of total income, research activities provides 15% of income, and other activities provide 4% of

¹⁸ Research income includes: governmental funds for research (non-competitive grants), funds for development projects, funds for appropriated projects, funds for financing international cooperatives, sales of experimental research and development, and funds for Minister's projects and programs (GUS 2009).

income. In contrast, for PHEIs 93% of total income comes from teaching, 2% comes from research activities and 5% comes from other activities. Public HE hardly looks mighty in research but it looks mighty in intersectoral context.

Polish HE	From Teaching		From Research		From Other Activity *		Total
Sectors	Activity		Activity				
Private	2,782,353	93.2%	53,502	1.8%	148,494	4.9%	2,984,349
Public	12,389,974	80.8%	2,277,016	14.8%	662,543	4.2%	15,329,533
Total	15,172,327	82.8%	2,330,519	12.7%	811,038	4.4%	18,313,884
<u><u>C</u></u>	41	tinne CI	10 2000				

Table 4. Operating Activity Incomes in Private and Public Sectors Year 2009

Source: Author's calculations GUS 2009

*Other activities include income from business/economic activities, sale of materials and goods, and activities not defined by GUS

The differences between incomes generated from research activity again indicate that the private sector is much less involved in research than is the public sector. This analysis supports the hypothesis that private and public HE sectors have different primary functions with the private sector being teaching and training oriented and the public sector being responsible for whatever research in conducted.

A third financial indicator of the huge private-public gap in research is cost distribution. For public institutions the cost of teaching activity is 84% of total costs, of research activities 15% and of other activity 1%. In contrast, for private institutions the cost of teaching activity comprises 96% of total costs, of research activities 3% and of other activity 1%. Again, this difference in costs distributions indicates that private sector in hugely less involved in investing in research activities than is the public sector in Poland.

	Of Teaching Activity		Of Research		Of Busines	Total	
Sectors			Activity		Economic		
					Activity		
Private	2,659,653	96.3%	78,674	2.8%	22,700	0.8%	2,761,027
Public	12,557,40	84.0%	2,263,483	15.1%	115,286	0.7%	14,936,177
	7						
Total	15,217,06	85.9%	2,342,157	13.2%	137,987	0.7%	17,697,205
	0						

Table 5. Costs of Private and Public HEIs in Year 2009

Source: GUS 2009

The analysis of the cost distribution among teaching, research, and business/economic activities clearly demonstrates that public HEIs spend a much higher percentage of their funds on conducting research than PHEIs do. This finding can be partially explained by the distribution of governmental financial support (for teaching and research) for the HE system, going almost exclusively to the public sector, allowing that sector to invest funds in research.

4.3.2.2 Core Science Subfields

Not only financial indicators but also enrollment in core science subfields shows a research-related difference in primary functions between public and private sectors. The overall distribution of fields of study and academic disciplines offered by both sectors is discussed under the Field subject matter hypothesis in this chapter. Here, in the analysis of primary function, I focus only on three core science subfields which strongly depend on conducting research.

Findings on the enrollment in core science fields of study show that the public sector is almost the exclusive sector for educating students in life sciences, physical sciences, and mathematics academic disciplines. GUS follows the International Standard

Classification of Education ISCED'97 in defining subfields¹⁹. It is the public sector that enrolls 89% of students in life sciences, 99% in physical sciences, and 99% of students in mathematics and statistics (See Table 6). In contrast, the private sector educates students in fields of study that are less tied to research. (Again, the full distribution of students' enrollment in fields of study by sector is presented in this chapter under the Field subject matter hypothesis.)

Core Science Subfields and Business & Administration Subfield					
Subfield studies	Private	Public	Total		
Life Sciences	3935	31,702	35,637		
Life Sciences - % of Enrollment by HE Sectors	11.0%	89.0%	100%		
Physical Sciences	238	27,675	27,913		
Physical - % of Enrollment by HE Sectors	0.9%	99.1%	100%		
Mathematics and Statistics	227	14,951	15,178		
Mathematics and Statistics - % of Enrollment by HE Sectors	1.5%	98.5%	100%		
Business & Administration	226,015	213,857	439,872		
Business & Administration - % of Enrollment by HE Sectors	51.4%	48.6%	100%		

Table 6. Enrollment in Private and Public Sectors by Subfields

Source: Author's calculations GUS 2009

¹⁹ GUS defines subfield based on the International Standard Classification of Education ISCED'97. The subfield mathematics and statistics includes the following academic disciplines: mathematics, mathematics and economics. Inter faculty mathematical and natural science studies, and quantitative methods in economy and information systems. The subfield physical science includes the following academic disciplines: geography, biophysics, acoustics, the sciences, nanotechnology, the application of physics in biology and medical sciences, bioinformatics and biology of systems, nanostructures engineering, astronomy, chemistry, physics, medical physics, geology, geophysics, and oceanography. The subfield of life science (biology) includes the following academic disciplines: biology, microbiology, biology and geography, biology and geology, environmental protection (environmental sciences), neurobiology, and nature. The subfield business and administration (economy and administration) includes the following academic disciplines: administration, finance and banking, finance and accounting, international relations, commodity science, management, management and marketing, economy and public administration, European social communication, international economy relations, logistic management, econophysics, international business, economics, finance and accounting, territorial self-government and regional policy.

http://www.unesco.org/education/information/nfsunesco/doc/isced_1997.htm

The only marginal share of private enrollment in the core science subfields suggests a lack of research activities in PHEIs. The very low percentage of private enrollment in core science subfields is indirect evidence that Polish PHEIs trail far behind public HEIs in terms of research.

To the above statistical analyses of data, I present expert testimony from interviews about the primary function of HEIs in Poland. The interview findings also support my hypothesis that the important mission of privates is to provide teaching and training for their students rather than being involved in research activities. The nationally well-known professor #I emphasizes that majority of research is done in public universities to the extent that the level of research in the private sector is marginal. Only a few PHEIs are receiving competitive governmental grants to conduct research, and even these are mostly one time grants. In contrast, many public HEIs have a large number of governmental grants that they receive every year for research projects. For example, an average large public university may annually receive 500 external grants, including 100 governmental grants, whereas the whole private sector may receive less than 50 grants. The best public university may have 250 faculty members that conduct research whereas even the best PHEIs may have a maximum 10-20 faculty that conduct research. These statements were supported by another interviewed professor #G, who has experience working in private and public institutions. The interviewee #G emphasizes that PHEIs place priority on teaching and training whereas conducting research is marginalized and not required. A similar opinion is presented by the Fulbright foundation specialist, who emphasizes that there is a tremendous difference in research activities between private and public sectors in Poland. He too confirms that the great majority of research is

conducted in public HEIs, which have grants and expensive laboratories for their research projects.

4.3.3 Conclusion

The analysis of the indicators illustrates that in Poland the PHE sector focuses on teaching and training and is far behind the public HE sector in terms of research. PHEIs receive and spend significantly less on research activities than public HEIs do. Moreover, the marginal share of private enrollment in the core science subfields further suggests a lack of research activities in PHEIs. Overall, the findings of my research illustrate that Polish PHEIs—like most private HEIs globally-- are focused on teaching and training rather than on research. Moreover, the huge magnitude of intersectoral difference goes beyond what has been documented for other national cases, and the documentation here has been multifaceted.

4.4 Field subject matter

I hypothesized that the Polish private sector's offerings are concentrated in a set of "soft" fields, inexpensive to offer, whereas public enrollments are much higher than the private's in the "harder" and costlier to offer disciplines.

4.4.1 Literature

4.4.1.1 Global Context

According to the available global literature studies, private institutions' concentration is overwhelmingly in inexpensive fields (Levy 1986; Levy1992; Levy 2002). In contrast, public HEIs often present a fairly wide selection of programs and can offer "hard" science expensive programs.

4.4.1.2 Regional Context

The most common study fields in PHE in Eastern Europe are in the social sciences, economics, and law, which generally require low infrastructure costs and little investment (Amaral, Rosa, and Tavares 2007). Fried, Glass, and Baumgartl's (2007) find economics a large field offered by PHEIs from all seven Eastern European countries²⁰ discussed in their project. Social sciences²¹ is the second most popular study field offered by PHEIs in these countries; six countries offer it as a large field and only one country (Romania) is an exception. Law as a large field is offered by five counties, as a small field by two counties (Fried, Glass, and Baumgartl 2007). As we also see globally, the commercially oriented fields are the popular fields for expanding enrollments, reflecting what students see on the job market. The Fried et al. (2007) findings show that PHEIs' programs are oriented more toward popular fields in demand by students and/or labor markets rather than fields that lie along academic traditions.

4.4.1.3 Poland Literature

For the Polish case: the Social sciences, law and economics field includes these subfields: social sciences, business and administration, law, and journalism and information. Footnote 2 includes a full explanation about subfields. The business and administration subfield has the largest private enrollment; moreover, the private social sciences subfield has many commercial academic disciplines, not only classical social sciences academic disciplines.

²⁰ The seven countries are Albania, Bulgaria, Estonia, Poland, Romania, Russia, and Ukraine.

²¹ The social sciences include political sciences, administration and management, international relations, pedagogy, psychology, and sociology whereas economics includes business, commerce, finance, and banking.

An assessment of fields of study in the whole Polish HE system, with an emphasis on the private sector (Jablecka 2007b) concludes that the most popular study programs in the entire system and in the private sector are management and marketing, economics, pedagogy and business administration. These fields are considered the "soft" fields. Jablecka's findings support Duczmal (2006), who emphasizes that the great majority of selected private providers offered low cost undergraduate study course in high demand fields, in economics, management and humanities. Neither author's work, however, presents a detailed field by field account as we proceed to below. Moreover, neither presents a detailed analysis by subfields, which proves very revealing. Both authors do present some data about fields and subfields but they do it differently than I do it. Jablecka presents some data from Szulc (2004) about Polish HE study programs and popular study programs in private HEIs without dividing them into fields and subfields. Duczmal focuses more on field studies rather than on subfields but he gives some information about subfields especially for certain PHEIs. Additionally, Rozmus and Ordon (2008) present data on the most popular fields of study by sectors.

4.4.2 Findings

Based on the PHE literature I hypothesize that the private sector's offerings are concentrated in a set of "soft" fields, inexpensive to offer, whereas public enrollments are much higher than the private's in the "harder" and costlier to offer disciplines. The hypothesis about the differences in the fields of study offered by private and public sectors is tested based on the data on enrollment by fields and subfields of study presented in GUS database and expert testimony on program offered by both sectors. Thus, as with many other hypotheses, we use both quantifiable data and qualitative

information. Together they provide, on the subject matter hypothesis, strong evidence on the breath of the hypothesis via evaluation of the persuasive indicators for the Polish case.

4.4.2.1 Fields of study²²

The findings on the distribution of enrollment by fields of study in the Polish private and public sectors strongly support our subject matter hypothesis. Private enrollment concentrates on soft social sciences fields, notably the subfields of: social sciences, business and administration, law, and journalism and information²³ and education fields but trails badly in technology, industry, construction. Almost 55% of students studying in PHEIs are enrolled in the Social sciences economics and law field, and another 17% are enrolled in pedagogy programs so almost 72% of all students enrolled in PHEIs are in these two fields. However, the private sector is severely underrepresented in the Science fields and Technologies and Agriculture fields. For example, less than 3% of the private

²² GUS shows eight major field categories: Education includes only one subfield: teacher training and education science. Humanities and Art includes two subfields: humanities and arts. Social science, Economics, and Law includes four subfields: social science, economics, law, and journalism and information.Science includes four subfields: mathematics and statistics, physical science, life science (biology), and computer science. Health and Welfare includes two subfields: health and social welfare. Technology, Industry, Construction includes three subfields: engineering and engineering trades, manufacturing and processing, and architecture and building. Agriculture includes two subfields: agriculture, forestry and fishery, and veterinary. Services include subfields: personal services, transport services, environmental protection, and security services.

http://www.unesco.org/education/information/nfsunesco/doc/isced_1997.htm

²³ GUS defines subfields based on the International Standard Classification of Education ISCED'97. The field social science, economics, and law includes four subfields: Social group includes the following academic disciplines: economics, ethnology, political science, psychology, sociology, cultural studies, studies of the family, European studies, social politics, spatial economics, oriental studies, East studies, cultural studies of Middle-East Europe. The subfield economics and administration includes the following academic disciplines: administration, finance and banking, finance and accounting, international relations, commodity science, management, management and marketing, economy and public administration, European social communication, international economy relations, logistic management, econophysics, international business, economics, finance and accounting, territorial self-government and regional policy. The subfield law includes only the following academic discipline: Law. The subfield journalism and information includes the following academic discipline: scientific information and librarianship, journalism and social communication.

sector versus 20% of the public sector is found in the Technology, industry, construction field. Only 0.4% of students from the private sector are enrolled in the Agriculture field in comparison to 2.7% students from the public sector. The difference is also striking if we compare the real numbers of enrollment by sector. Only 2,300 students in the private sector are enrolled in the Agriculture field in contrast to over 34,000 students in public sector. This finding is consistent with findings presented by Levy (1986) on Spanish American private enrollment in agriculture studies between years 1977-80. Parallel to the Polish findings agriculture enrollment was very low (7,570 students) in private sectors in Latin American countries compared to public sectors (93,881 students).

Somewhat surprisingly, the Polish sectors have similar percentages of enrollment in the Health and welfare services field²⁴. Generally, the Health field is an expensive one so the public sector might be expected to have much higher percentage of enrollments than the private sector. Yet the Polish public sector has a little less than 8% of student enrollment in the Health and welfare services field whereas the private sector has enrollment about 6% in this field. As Levy had found, it is not the aggregate Health field that shows big private-public differences, though a very different picture emerges for subsectors.

Indeed, as seen in the global literature, the similarity Health field symmetry fades when we look at the internal composition of this field. It is very different in the private from the public sector.

²⁴ GUS defines the health and welfare field based on the International Standard Classification of Education ISCED'97. The field includes two subfields the health and social welfare and the following academic disciplines: Medical analytics, Pharmacy, Medicine, Nursing, Dentistry, Obstetrics, Radiology technology, Physiotherapy, Medical rescue, Public health, Dental techniques, Dietetics, Dental hygiene, Social work, Social prevention and rehabilitation resocialization.

Evaluation of two subfields--health and welfare services—does not show the internal differences in the Health field. However, evaluation of health academic disciplines offered by both sectors clearly illustrates the nonexistence of the private sector in medical sciences. *None* of the 330 PHEIs offers the medicine academic discipline or medicine-dentistry academic discipline; consequently, only public universities educate doctors and dentists in Poland. In contrast, the private sector's Health field is focused on physiotherapy and nursing academic disciplines. This internal analysis of health studies parallels what is presented in the Levy's (1986) analysis of Spanish American private enrollment in health sciences where the private sector has much lower percentages of enrollment in medicine (and also in the exact sciences while having much greater percentages in inexpensive business-related fields).

Field Study	Private		Public]	Total	
Education-Pedagogy	107,341	17.0%	126,552	10.0%	233,893	12.3%
Humanities and Art	36,315	5.7%	138,246	10.9%	174,561	9.2%
Social Sciences, Economics	344,252	54.4%	421,585	33.3%	765,837	40.3%
& Law						
Science	34,858	5.5%	124,952	9.9%	159,810	8.4%
Health and Welfare	34,625	5.5%	97,386	7.7%	132,011	6.9%
Technology, Industry,	17,598	2.8%	247,835	19.6%	265,433	14.0%
Construction						
Agriculture	2,343	0.4%	34,272	2.7%	36,615	1.9%
Services	55,765	8.8%	76,089	6.0%	131,854	6.9%
Total	633,097	100%	1,266,917	100%	1,900,014	100%

Table 7. Eight Main Field Studies Enrollment Year 2009

Source: Author's calculations GUS 2009

The public sector has almost twice the percentage of enrollments in Humanities and art field than the private sector (See Table 7). This finding goes against the simple "soft" and "inexpensive" aspects of hypotheses. Instead, it starkly underscores the commercial focus of the private sector. In short, the Humanities and arts field has two of the projected characteristics to be heavily private—softness and cost—but not a thirdcommercial orientation. Ours then is a finding that clashes with Levy's. He found humanities holding a significantly higher share of the public than the private enrollment (6.5 versus 3.7). Future research in other countries and regions might probe this discrepancy.

Overall, Poland's private sector has much lower percentages of enrollment in the Science and Technology and Agricultural fields and much greater percentages in the Social science and Education fields. Even based on fields alone, our hypothesis on subject matter intersectoral distinction would be supported.

4.4.2.2 Subfields

The hypothesis is further supported by evaluation of subfields for the three main field studies (as we analyzed above for the Health field): Social sciences, economics and law, Services, and Science. The private-public comparisons across field groups are striking, but we can follow the leading global literature (Levy 1986) in penetrating inside field groups and discover even starker differences. Thus, the distribution of enrollment in the subfields of Social sciences, economics and law shows that the private sector focuses on the business and administration subfield--with 66% of students. The public sector, in contrast, has more diversified enrollment distribution in the subfields of Social sciences, economics are enrolled in business and administration, 35% in Social subfield, 11% in law, and 3% in journalism (See Table 8). The social subfield is more academic. Nonetheless, even the public sector has business-related subfields as the most populous within the Social sciences, economics and law field. In other words, business-related studies are popular overall and in such areas the private

sector takes the lead. These findings are consistent with Levy's (1986) analysis of subfields of study in private and public sectors in Latin America.

Subfield Studies	Private		Public	Т	Total	
Social Sciences	95,234	27.7%	147,861	35.1%	243,095	31.7%
Social - % of Enrollment by	39.2%		60.8%		100%	
HE Sectors						
Business & Administration	226,015	65.7%	213,857	50.7%	439,872	57.4%
Business & Administration -	51.4%		48.6%		100%	
% of Enrollment by HE						
Sectors						
Law	12,677	3.7%	46,755	11.1%	59,432	7.8%
Law - % of enrollment by HE	21.3%		78.7%		100%	
Sectors						
Journalism & Information	10,326	3.0%	13,112	3.1%	23,438	3.1%
Journalism & Information - %	44.1%		55.9%		100%	
of Enrollment by HE Sectors						
Total	344,252	45.0%	421,585	55.0%	765,837	100%

Table 8. Social Sciences, Economics and Law Subfields Enrollment Year 2009

Source: Author's calculations GUS 2009

The sharp contrast between enrollment in private and public sectors is visible for the law field subfield as well. There the public sector has twice the percentage of the private sector. This difference is not consistent with Levy's (1986) findings for the Spanish American HE for years 1977-80 where the total public enrollment in the law field was lower (7.3%) than the total private enrollment (11%) in the law field. It will be interesting to see what future studies show about contrasting sectoral enrollments in law.

Another powerful subfield confirmation of large private-public differences in fields emerges in the field of Services²⁵. Evaluation of the four subfields of the Services

²⁵ GUS defines the services field based on the International Standard Classification of Education ISCED'97.It is a field of study that includes four subfields: Personal services- Hotel and catering, travel and tourism, sports and leisure, hairdressing, beauty treatment and other personal services: cleaning, laundry, dry-cleaning, cosmetic services, domestic science. Transport services - Seamanship, ship's officer, nautical science, air crew, air traffic control, railway operations, road motor vehicle operations, postal service. Environmental protection - Environmental conservation, control and protection, air and water pollution control, labor protection and security. Security services - Protection of property and persons: police work and related law enforcement, criminology, fire-protection and firefighting, civil security; military. Info from ISCED'97 website :

http://www.unesco.org/education/information/nfsunesco/doc/isced_1997.htm

field strongly supports my hypothesis due to the fact that 80% of enrollment in PHEIs is concentrated in only one subfield "personal services." In contrast, the public sector has personal services only in a tie as its largest subfield with 34% there and 34% in environmental protection, along with 18% in transport services, and 13% enrolled in security services (See Table 9).

Personal services programs commonly include academic disciplines like tourism and recreation, cosmetology, and sports. These academic disciplines are very popular in PHEIs due to their market orientation. In contrast, environmental protection, transportation and security services are programs mostly offered by public HEIs. The most dramatic private-public contrast indeed comes in environmental protection, maybe the epitome of a social good oriented undertaking.

Subfield Studies	Private		Public		Total		
Personal Services	44,599	80.0%	26,055	34.2%		70,654	53.6%
Personal Services - % of	63.1%		36.9%			100%	
Enrollment by HE Sectors							
Environmental Protection	975	1.7%	26,281	34.5%		27,256	20.7%
Environmental Protection - % of	3.6%		96.4%			100%	
Enrollment by HE Sectors							
Transport Services	4,625	8.3%	13,905	18.3%		18,530	14.1%
Transport Services - % of	25.0%		75.0%			100%	
Enrollment by HE Sectors							
Security Services	5,566	10.0%	9,848	12.9%		15,414	11.7%
Security Services - % of	36.1%		63.9%			100%	
Enrollment by HE Sectors							
Total	55,765		76,089		1	31,854	
Q A	CLIC 2000	`					

Table 9. Services Subfields Enrollment Year 2009

Source: Author's calculations GUS 2009

Additionally, the findings on enrollment distribution in the subfields of Science²⁶ field further strongly support the hypothesis of intersectoral distinctiveness in subject

²⁶ GUS defines science field based on the International Standard Classification of Education ISCED'97. The subfield mathematics and statistics includes the following academic disciplines: mathematics, mathematics and economics, interfaculty mathematical and natural science studies, and quantitative methods in economics and information systems. The subfield physical science includes the

matter. Only 11% of students from the private sector's Science study life sciences, and less than 2% between the two subfields of physical and mathematics and statistical sciences. Quite the contrary: 22% of the public university's students are in physical sciences and 12% are in mathematics and statistics (See Table 10). A lack of physical and mathematics subfields in Polish PHEIs confirms the global findings, which show that these subfields are quite publicly inclined (Levy 1986).

The computer science subfield is the only one among science subfields that has a larger percent of students enrolled in the private sector. It is the only one where the private share outdistances the public share – and it does so by more than two to one in our subfield analysis. Over 87% of students from PHEIs who study Science focus on the computer science subfield—clearly the most commercially oriented one and also one relatively inexpensive to offer. Although any science presence of PHE may undercut the intersectoral distinctiveness hypothesis, the subfield analysis tends, if anything, to underscore the hypothesis. The exceptionally high private enrollment in this subfield fits the logic of the broad private versus public generalizations, as the computer science subfield is not so expensive to offer and does not require costly academic discipline laboratories, and is very relevant to the labor market. The subfield computer science and econometrics, technical application of Internet, and industrial computer science.

following academic disciplines: geography, biophysics, acoustics, the sciences, nanotechnology, the application of physics in biology and medical sciences, bioinformatics and biology of systems, nanostructures engineering, astronomy, chemistry, physics, medical physics, geology, geophysics, and oceanography. The subfield of life science (biology) includes the following academic disciplines: biology, microbiology, biology and geography, biology and geology, environmental protection (environmental sciences), neurobiology, and nature. The subfield computer science includes the following academic disciplines: computer science, computer science and econometrics, technical application of Internet, and industrial computer science.

http://www.unesco.org/education/information/nfsunesco/doc/isced_1997.htm

Subfield Studies	Private		Public		Total	
Life Sciences	3935	11.3%	31,702	25.4%	35,637	22.3%
Life Sciences - % of Enrollment	11.0%		89.0%		100%	
by HE Sectors						
Physical Sciences	238	0.7%	27,675	22.1%	27,913	17.5%
Physical - % of Enrollment by HE	0.9%		99.1%		100%	
Sectors						
Mathematics and Statistics	227	0.7%	14,951	12.0%	15,178	9.5%
Mathematics and Statistics - % of	1.5%		98.5%		100%	
Enrollment by HE Sectors						
Computer Science	30,458	87.4%	50,624	40.5%	81,082	50.7%
Computer Science - % of	37.6%		62.4%		100%	
Enrollment by HE Sectors						
Total	34,858	100%	124,952	100%	159,810	100%
Source: Author's calculations	GUS 200	9				

Table 10. Core Science Subfields Enrollment Year 2009

Source: Author's calculations GUS 2009

To this statistical analysis of data on the distribution of field studies in the private and public sectors I present expert testimony in interviews about the offered programs in both sectors. The testimony is consistent with the data and, furthermore, shows how the two sectors are perceived as far as their field of study emphases. One interviewee #I emphasized the PHE relative absence in medicine, core science programs like physics or chemistry, and many technical programs. He notes that these programs tend to be expensive and require specialized laboratories that cannot be funded from the private institutions' budgets that are usually tuition driven, even for leading privates. This statement is echoed by another interviewee, #G, who claims that there is no scientifictechnical private university that can at all compete with scientific-technical public universities.

4.4.3 Conclusion

The findings from analyzing the fields and subfields of study and the expert testimony strongly support the hypothesis that private enrollment concentrates on soft social sciences fields, notably the subfields of: social sciences, business and administration, law,

and journalism and information and education but trails badly in technology, industry, and construction. Evaluation of subfields of four main fields of study clearly illustrates that PHEIs tend to offer programs in soft and frequently inexpensive subfields. The strong findings hold for the both the fields and subfield indicators. Support for the hypothesis comes from both data and expert testimony.

Evaluation of subfields of the Science field identifies an apparent exception—the subfield of computer science--that has a larger percent of students enrolled in the private sector. It is the only Science subfield where the private share outdistances the public share – and it does so by more than two to one. However, we have inclined to see computer science is not like the rest of Science and thus as something of the exception that proves the rule.

4.5 Concentration of Institutional Offerings

In keeping with the theme that Polish PHEIs follow the global pattern by being focused, narrow, coherent, and selective in their operations (Levy 1992). I hypothesized a difference in the degree of concentration between private and public HEIs in Poland when it comes to fields of study. Polish PHEIs are typically niche institutions with a narrow range of offered study programs whereas public institutions offer more diverse number of programs.

4.5.1 Literature

According to the global literature, private institutions, particularly outside the United States, are more specialized and often manage fewer programs than public HE institutions (Levy 1986; Levy 1992). The Eastern Europe regional findings also show that PHEIs are more specialized and offer fewer fields than public HEIs (Fried, Glass, and Baumgartl 2007). The findings presented in Polish literature show that Polish PHEIs offer fewer programs than public HEIs (Jablecka 2007a; Jablecka 2007b; Duczmal 2006).

4.5.2 Findings

I test the hypothesis about the difference in the degree of concentration by three separate dimensions: fields, subfields, and academic disciplines. Extant literature has been mostly just about fields, with some study getting to the subfield level. It does not appear that any prior study has covered all three levels. I test mostly through the national GUS database.

Ideally, we would like to see concentrations at the level of individual institutions. To a large extent, the global literature deals with the narrowness of institutions but when it comes to fields of study it is usually forced to deal with sectors. Such is the case with our analysis of Poland. The GUS database does not provide information about fields, subfields, and academic discipline on the institutional level so there is no possibility to conduct analysis for individual institutions. The special GUS report shows information on fields, subfields, and academic discipline by institutions but the task of analyzing that data institution by institution and then aggregating in statistics that capture the average picture for institutions would require too much time.

Fortunately, what is dictated by necessity carries a virtue. If we find major differences in field concentration *even* at the sectoral level, then there is good reason to expect that it is still greater at the institutional level. The same point will hold below for subfields and academic disciplines.

4.5.2.1 Eight Main Fields of Study

The GUS data on the eight main fields of studies in HEIs indicate that private and public sectors offer programs in the same main fields. However, it is important to compare the

percentages of students enrolled in the eight main fields of studies by sectors to understand the degree of concentration in both sectors. Although the private sector offers programs in all eight fields, almost 71% of its students are concentrated in only two fields of studies. These two are Education-pedagogy and Social science, economics, and law. Only in three out of the eight main fields of studies does the private sector have enrollment above 6%. These findings clearly demonstrate the very narrow concentration of PHEIs; they are active in only a few fields of study.

In contrast, the public sector demonstrates broader distribution of enrollment by field of study. 75% of students from the public sector are spread out over four fields of studies. For each field besides Agriculture the public sector has enrollment above 6%. The distribution of students by field of study is much greater in the public sector than in the private sector. The public sector's largest field concentrates only 33%, followed by 20% in the second field and at 10% in three other separate fields. In contrast, the largest field concentrates 54% of students in PHEIs, followed by 17% in the second field, and 9% in one field, and below 6% in four other fields. Our evidence on field of study shows the public sector much less concentrated than the private sector. This strongly supports our hypothesis about concentration.

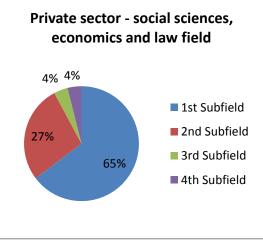
4.5.2.2 Subfields

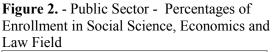
But we can go further. We can carry the analysis to subfields. I focus my analysis on subfields of four out of the eight main fields. That is because the four analyzed subfields show strong difference in the degree of concentration by private and public sectors. The four not analyzed fields include Education, which has only one subfield overall, and Agriculture, for which private has only very low enrollment (0.4%) and even the public

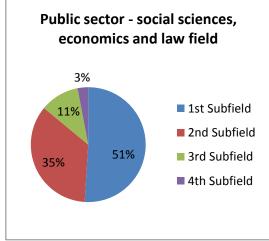
sector does not have much. Humanities and arts and Health and welfare, both have only two subfields, but it is fair to note that and there is no difference between the percent of enrollment in the private and public sectors. However, my analysis of Health and welfare presented in this chapter under Field subject matter indicates that there are important differences in concentration of academic disciplines between private and public institutions. I am presenting data on subfields' differences between the private and public sectors starting from the smallest difference, in the Social science field, to the largest difference, in the Science field.

The four subfields inside the Social sciences, economics and law field show that degree of concentration is moderately higher within the private than the public sector. 65% of the field's students enrolled in PHEIs are concentrated only in one subfield (business and administration), another 27% study in the second subfield, and less than 4% in the third and fourth subfields (See Figure 1).







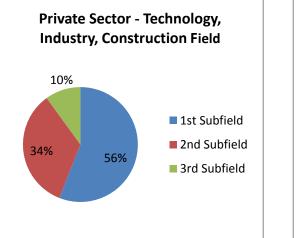


Figures 1 & 2 -Source: Author's calculations GUS Report 2009

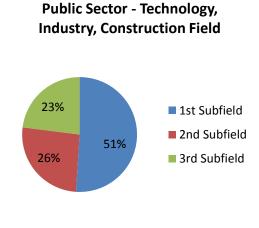
The public sector, in contrast, has a more diversified enrollment distribution in subfields of Social sciences, economics and law, which strengthens support for the hypothesis that the public sector is less specialized than the private sector. Among students enrolled in the subfields in public HEIs, 51% are enrolled in business and administration, 35% in social subfield, 11% in law, and 3% in journalism (See Figure 2).

Analysis of the three subfields of the Technology, industry, construction field also shows a stronger concentration within the private sector. 56% students enrolled in PHEIs are concentrated in only one subfield, another 34% study in the second subfield, and less than 10% in the third subfield (See Figure 3). In contrast the enrollment distribution by subfields is more equal in the public sector with percentages of 51%, 23% and 26%, respectively (See Figure 4).

Figure 3. - Private Sector - Percentages of Enrollment in Technology, Industry, and Construction Field



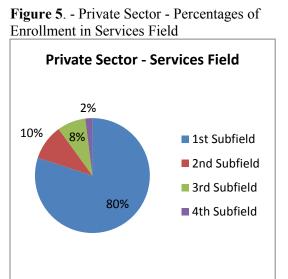




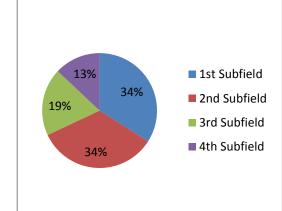
Figures 3 & 4 - Source: Author's calculations GUS Report 2009

Analysis of the four subfields of the Service field shows a much stronger concentration within the private than the public sector. 80% of students from the private sector study in just one (personal services) out of the four subfields. In contrast, the

public sector has a much more equal distribution of enrollment over its four subfields. It has 34% students in each of two subfields, 19% in the third subfield, and 13% in the fourth subfield.







Figures 5 & 6 - Source: Author's calculations GUS Report 2009

Striking also are the findings on the subfields within the core Science field. Again a large majority (87%) of PHE students are enrolled in only one out of four subfields. For two subfields the enrollment is below 1%. Again the public sector has a much more equal enrollment distribution among the four subfields. It has with 25% of students in life sciences, 22% in physical sciences, 12% in mathematics and statistics, and 40% in computer science. Both sectors have the same leading subfield, computer science, but that accounts for more than twice the share of the overall field within the private sector as it does within the public sector.

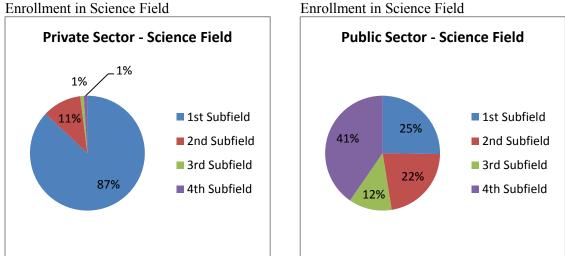


Figure 8. - Public Sectors -Percentages of

Figures 7 & 8 - Source: Author's calculations GUS Report 2009

4.5.2.3 Academic disciplines

Figure 7. - Private Sectors - Percentages of

Having evaluated intersectoral enrollment in all the fields and then some subfields, I now focus on the distribution of offered academic disciplines within subfields in Polish HE.

The findings of the academic disciplines (and interdisciplinary academic disciplines) offered within the private and public sectors support the hypothesis that the private sector is more concentrated or specialized than the public sector. The private sector's 330 institutions offer programs in only 82 academic disciplines and have *no* interdisciplinary academic disciplines whereas the public sector's 131 institutions offer programs in 169 academic disciplines and 24 interdisciplinary academic disciplines (See Table 11). The public sector offers more than twice as many academic disciplines as the private sector while having well under half the number of institutions. The private sector, despite having well over twice the number of institutions as the public sector, offers less the half the number of academic disciplines that the public sector does. When it comes to interdisciplinary academic disciplines, the intersectoral contrast is much starker still.

Polish HE Sectors	Private	Public
Academic Disciplines	82	169
Interdisciplinary	0	24
Academic Disciplines		
Total	82	193

Table 11. Academic Disciplines and Interdisciplinary Academic Disciplines by Sector

Source: Author's calculations Special GUS Report 2009

Thus, our statistical analysis of data is conclusive regarding concentration of study. The private sector is much more concentrated than the public sector. One could call it narrower. Expert testimony merely embellishes a few points in regard to concentration. One interviewee (#I) noted that PHEIs offer only half or so of academic disciplines offered by public institutions. In fact, according to two other interviewees (#F & #G) most of the large number of private demand-absorbing institutions have only one department that offers one or two subfields whereas many public institutions, especially universities, offer programs in several fields of study with numerous academic disciplines.

4.5.3 Conclusion

The findings on field, subfield, and academic disciplines strongly support the hypothesis that there is a major difference in the degree of concentration of institutional offerings between private and public HEIs in Poland. Although both sectors offer programs in all eight fields of studies, the findings clearly show that the public sector has a much broader distribution of enrollment by field of studies than the private sector. Similarly, the analyses of enrollment distributions in subfields of four fields of study illustrate that the private sector has enrollment concentrated only in some subfields whereas enrollment in the public sector is more equally distributed across subfields. Furthermore, the findings of

the academic disciplines (and interdisciplinary academic disciplines) offered within the private and public sectors support the hypothesis that the private sector is more concentrated or specialized than the public sector.

4.6 Student Quality

I hypothesized in chapter 3 that Polish public HEIs attract the leading students who compete for free prestigious places in nationally known universities whereas PHEIs, in contrast, have much less selective the institutional admission policies and accept students with lower qualifications than some public counterparts.

4.6.1 Literature

4.6.1.1 Global Context

The intersectoral contrast in student quality from the global perspective has been discussed Levy (2008). He emphasizes that public institutions have dominance in a variety of quality dimensions. These include status, faculty--and students. This intersectoral contrast stems in large part from the generally large size of demand-absorbing PHE where most students are not choosing their institutions over other institutions as much as choosing some place over no place.

Unfortunately, though the generally lower quality of the private than the public student body is rarely questioned in the literature, few objective indicators are employed to sustain general impressions. One exception is the distribution of full/part time students as an indicator of student quality. On this indicator the common assertion—though rarely based on hard data--has been that PHEIs have usually had a significantly lower percentage of full-time students than have their public counterparts (Levy 2004).

4.6.1.2 Regional Context

Fried, Glass, and Baumgartl (2007) emphasize that the admission process, based on evaluation of secondary school grades and higher education entrance exams results, is a significant determinant of the reputation of HEIs in Europe. The HEIs which attract higher scoring students have the better reputation for quality. According to the authors, in many European public universities the high-scoring students from privileged backgrounds are the ones most often accepted at 'tuition-free' status. In contrast, PHEIs which admit students who have scores below public HEIs requirements bear a reputation for catering to 'low quality' students. Furthermore, common features of PHE sectors, including the Polish private sector, include rather open admissions procedures or low levels of selectivity (Fried, Glass, and Baumgartl 2007). Consequently, access-providing PHE sectors are commonly regarded to be of low quality because they accept students who have lower scores than those who attend public universities.

The differences between percentages of full-time and part-time students enrolled in private and public sectors in the European region overall and specifically in the Eastern Europe are not broadly discussed in the pertinent geographical literature. Fried, Glass, and Baumgartl (2007) do not analyze this difference between sectors . Kwiek (2009) does indicate that there are full-time/part-time enrollment differences among private and public institutions in the Eastern European region.

4.6.1.3 Poland Literature

There is not much discussion about the student quality overall in the Polish literature. One of the reasons is that data on entrance requirements are not published by individual HEIs, which establish their own requirements and are not obligated and in most cases not willing to publicly share entrance data. Consequently, data on entrance requirements are not available and comparison of students accepted by individual institutions or sectors is not feasible. But there are several references to the offering of predominantly part -time programs and evening studies by a majority of private providers. With those references go stated perceptions that these programs are low quality, attended by less selective students (Duczmal 2006; Jablecka 2007b; Kwiek 2008b; Kwiek 2008a). For example, Jablecka (2007a; 2007b) emphasizes that part-time programs offered by PHEIs are generally regarded by the academic community and employers as inferior.

4.6.2 Findings

Unfortunately, it is not easy to assess directly student quality in Poland. As just discussed, it is not even possible to gather data on the qualifications of entering students. That is why my hypothesis about the difference in quality of students in private and public HEIs is examined by analyzing three admittedly inferior quality indicators. Two have been used in the higher education literature, and one has not been. The two used indicators --full/part timers and expert testimony-- and the one not used indicator – ministry scholarships—do support my hypothesis about the differences in quality of students between private and public sectors. After evaluating two indicators with national data, I present testimony from interviews about the overall quality of students in the public and private sectors.

4.6.2.1 Full/Part Time Students

The split between full and part-time²⁷ students in Poland is equal: 49% studying in fulltime programs and 51% in part-time programs in academic year 2009/2010. But, as hypothesized, part-time programs are much more common for students enrolled in PHEIs than in public HEIs. 83% of students from private schools are part-timers in comparison to only 35% of students from public institutions (See Table 12).

Polish HE Sectors	Percent of Full-	Percent of Part-time
	time Students	Students
Public	65%	35%
Private	17%	83%
Total (both sectors)	49%	51%

Table 12. Distribution of Full-time/Part-time Students by Sector Year 2009

Source: GUS 2009

A partial explanation of the difference in percent of full/part timers lies in the fact that Polish public HEIs offer full-time free programs heavily subsidized by government. Lack of tuition in public programs allows students to be full-time, with less need to be working while studying. Additionally, after the quota of free -tuition places is met in public universities they accept additional students on part-time programs who, however, have to pay substantial tuitions. Students entering in this second tier lack the low tuition rationale for preferring public over private but still have the status and quality reasons. These reasons presented in the global and to some degree discussed in the regional literature appear to hold in the Polish case. Commonly part-time programs attract students from lower social economic classes who have to work while attending the postsecondary

²⁷ Definition of full/part time programs given by Polish Law On HE from 2005 (Dziennik Ustaw z 2005 r. Nr 164 poz. 1365). "Full-time" - the form of higher education in which curriculum is implemented in the form of classes that require the direct participation of faculty members and students in the dimension defined by education standards for this type of study designated by the university senate in accordance with Article. Paragraph 169. 2; "Part-time" - a different form than the full-time study, subject to the standards of education set for this type of study designated by the university senate in accordance with Article. Paragraph 169. 2;

institutions and the part-time mode of studies is the only study option for them. A similar case frequently occurs among 'older' students who already have jobs and/or families that can only devote limited time to starting or finishing bachelor or master degrees.

4.6.2.2 Ministry Scholarships

The hypothesis about intersectoral differences between private and public sectors in terms of quality of students is additionally supported by findings on the ministry scholarships in achievement in learning and sport. The ministry scholarships are given by specific ministries who define their own criteria and give the scholarships directly to students. These scholarships are prestigious awards won in judged competitions. I focus on the scholarships given by the Ministry of Science and Higher Education because this ministry gives annually the largest number of scholarships, indeed the great majority. For example, the Ministry of Science and Higher Education gave 1,250 scholarships out of 1,337 in academic year 2009/2010 (Author's calculations GUS 2009). The Ministry of Internal Administration awarded 16 scholarships, the Ministry of Health 55, the Ministry of Infrastructure 6, and the Ministry of National Security 10 scholarships in academic year 2009/2010. These data are provided by the GUS database but information about the percentage of ministerial scholarships given to private and public students is not available in the GUS database.

Ministry scholarships in achievement in learning and sport are given by specific ministries, not by HEIs. The rectors of HEIs send scholarship applications to the ministries, which make decisions about which students will receive the scholarships. I focus on scholarships awarded by the Ministry of Science and Higher Education for academic year 2010/11. On December 9th 2010, prof. dr hab. Barbara Kudrycka of the

Minister of Science and Higher Education announced a decision to give 1,138 scholarships – 1,012 in achievement in learning and 126 in achievement in sports^{28.}

Students from public HEIs receive roughly 90% of all ministry scholarships in achievement in learning and sport. 92% of scholarships in learning and 71% in sport are given to students from the public sector. In contrast, only 8% of scholarships in learning and 30% in sport are given to students from the private sector (See Table 13).

Scholarships in achievement in learning are given to students who have high GPA, show outstanding academic achievements, and exceptional involvement in research activities. Scholarships in achievement in sport are given to students who have high achievements in the national and international sport competitions defined by the ministry²⁹.

The findings on the ministry scholarships in achievement in learning support the hypothesis that public HEIs have at least at the top a superior student body than private HEIs have. Whereas the public sector educates 70% of students it receives over 92% of ministry scholarships in achievement in learning. In contrast, only 8% of scholarships are given to students from the private sector, which educates over 30% of students. On the other hand, in achievement in sports arena, ministry scholarships go to sectors proportional to overall enrollment. Poland's 70-30 split in enrollment is mirrored in scholarships for sports achievement.

²⁸ Information from the Ministry of Science and Higher Education website http://www.nauka.gov.pl/szkolnictwo-wyzsze/sprawy-studentow-i-doktorantow/system-pomocymaterialnej/stypendia-ministra/stypendia-ministra/artykul/informacja-w-sprawie-stypendiow-ministranauki-i-szkolnictwa-wyzszego-za-osiagniecia-w-nauce-ora-9/

²⁹ Information from the Ministry of Science and Higher Education website http://www.nauka.gov.pl/szkolnictwo-wyzsze/sprawy-studentow-i-doktorantow/system-pomocymaterialnej/stypendia-ministra/stypendia-ministra/artykul/informacja-w-sprawie-stypendiow-ministranauki-i-szkolnictwa-wyzszego-za-osiagniecia-w-nauce-ora-9/

Polish HE	Number of Stu	Number of Students Receiving Scholarships for Achievements in						
Sectors	"Learning"	دد	Sport"	To	tal			
Public	935	92.4%	89	70.6%	1,024	90%		
Private	77	7.6%	37	29.4%	114	10%		
Total	1,012	100%	126	100%	1,138	100%		

Table 13. Number and Percent of the Ministry of Science and HE Scholarships by HE

 Sectors

Source: Author's calculations the Ministry of Science and Higher Education Data 2010/11

I do not include the scholarships in achievement in learning and sport given by HEIs, even though the funding comes from the State budget, as an indicator of quality of student. That is because the Ministry of Science and Higher Education distributes funding to HEIs according to a formula based mainly on enrollment. In other words, this not a merit-based competition. In addition, HEIs define their own criteria for granting and renewing student support and the amount of individual grants. So not only are scholarships in achievement in sport given on non-academic grounds but even scholarships in achievement in learning are given to students who meet academic requirements set by each individual institution. There is no public data that could be used to compare the criteria utilized by each institution so there is no direct way to compare the quality of students who receive these scholarships in the public and private sectors³⁰.

To the above statistical analysis of data on the distribution of full-time and parttime students and distribution of ministerial scholarships in the private and public sectors I present expert testimony in interviews about the quality of students in both sectors. As noted near the beginning of the discussion about indicators of student quality, there is no easy way in Poland to compare the quality of entering (or existing or graduating) students

³⁰ Additionally, we have not seen other literature on private-public or other HE use this sort of indicator to gauge student quality. At least at this point, we lack sufficient grounds for using such an indicator. Consequently, the institutionally distributed scholarships should not be counted much as measures of quality.

between private and public sectors because data about entrance requirements are not publicly available in Poland. However, the broad question was discussed with several interviewees. It is important to remember that experts' judgments are not necessarily based on hard numbers although many of interviewees are very familiar with statistics related to private and public sectors of higher education. One (#I), who is a nationally well-known scholar, judges that about 95% of PHEIs accept any prospective student who holds a high school diploma. In contrast, the top-public HEIs have the highest entrance requirements followed by the good publics followed by the average publics. Similarly, the Fulbright specialist emphasizes that the level of qualifications between students from public and private sectors is greatly higher in the former. Both sectors tend to employee the same faculty members to a large extent but the most talented students tend to choose public HEIs whereas less prepared students choose PHEIs.

This viewpoint about the differences in the quality of students in both sectors is also supported by two interviewed professors (#D and #G) who have experience working in both public and private institutions. The interviewees emphasize that almost all PHEIs are responsible for "mass education" and accept anyone who has a high school diploma without other entrance requirements. That is why these interviewees say that most of the students enrolled in the first year at PHEIs need remedial education whereas their counterparts in public HEIs are ready for post-secondary education requirements. In this regard, Polish PHEIs are akin to demand-absorbing institutions globally, which tend to accept students that cannot pass the requirements imposed by good public HEIs.

4.6.3 Conclusion

Polish PHEIs have more part-timers than full-timers and more than public PHEIs do. These findings are consistent with global, regional, and prior Polish findings. Furthermore, the findings on the ministry scholarships in achievement in learning support the hypothesis that public HEIs have at least at the top a higher performing student body than private HEIs have. Similarly, the interviewed experts emphasize that, although some PHEIs may attract top students, overall most PHEIs accept students with lower qualifications than average public counterparts. Thus, the hypothesis on Student quality is supported for the Polish case by all three indicators: full/part time student distribution, the ministry scholarships, and expert testimony.

4.7 Faculty Quality

I hypothesize there are intersectoral differences of faculty quality in the private and public HE sectors with faculty quality being lower in the private sector than in the public sector.

4.7.1 Literature

4.7.1.1 Global Context

The global literature indicates that PHEIs (outside the US) have usually had a significantly lower percentage of full-time faculty than have their public counterparts, particularly their oldest public counterparts (Levy 2004; Levy 2010b). PHEIs hire part-time faculty to minimize the costs of educating students. In contrast, public institutions more often have their own staff, using part-timers more as complements. Overall, PHE tend to hire public university professors who get their main salary and benefits from their public institution (Levy 1986; Levy 2010b). Even for the US, as pointed by Altbach and

Finkelstein (1997), part-time faculty employment becomes more common and over onethird of the headcount faculty are part-timers. Baxter, Hughes, and Tight (1998) indicate that an increased proportion of the workforce in U.S. higher education is now employed on part-time and/or short-term contacts. However, the US still remains exceptional for our purposes for two reasons: not only is the workforce still mostly full-time but there is no decisive intersectoral difference.

4.7.1.2 Regional Context

Multiple-employment is common in the Eastern European region. Fried, Glass, & Baumgartl (2007) emphasize that many countries from Eastern European region face a problem of multiple-employment which raises questions about quality of teaching in HEIs. Frequently, faculty who have two positions have less time for preparing lectures, working on research projects and being involved in academic community. In addition, they tend to pay more attention towards their "home" institutions, usually public institutions, than towards their supplementary employment, usually private institutions.

4.7.1.3 Poland Literature

The phenomena of multiple-employment of Polish faculty is mentioned in the Polish literature on higher education but not discussed in depth (Jablecka 2007a; Duczmal 2006). It is noted that the law allows a faculty member to have two full-time positions in two different HEIs in Poland but one of the institution need to be designated as the primary workplace and the other one is an additional second workplace. Faculty may also hold part-time positions, usually hourly based in various HEIs. The employment structure in private and public HE sectors is discussed by Kwiek (2004) in his article that focuses on the international attractiveness of the academic profession in Poland. But very few of the sorts of findings below are analyzed in the Polish literature.

4.7.2 Findings

The PHE literature does not have much to say about measurements for faculty quality. Thus, this is one of the hypotheses where we might quickly turn to the broader higher education literature. There we see common indicators including percentage of part/full time faculty members, and especially highest academic degree achieved, and number of publications or involvement in research. Unfortunately, these indicators are not available for the Polish case. I do not analyze the rank of faculty members as an indicator of faculty quality differences in the private and public sectors, due to two important reasons. One is that ranks are given by individual institutions, not by any separate agency, so there is no basis for comparative analysis. The other reason is more particular to PHE literature and reality. Like their counterparts in many countries, Polish PHEIs largely use public professors; consequently, the same faculty members are employed in the private and public sectors.

However, fortunately, despite all these limitations, we can salvage and develop some intersectoral indicators of faculty quality. The first two relate to the part-time vs. full-time dimension. The GUS national database gives the numbers on full/part time faculty by sector. As analyzed below in my findings, even this indicator has a major flaw. But we find a related second—and quite powerful--indicator in the GUS data: number of faculty employed in their "primary workplace." To those indicators, I add a third, which is expert testimony.

4.7.2.1 Full/Part Employment

There are three different types of employment in Polish HEIs: full-time, part-time, and part-time contracted. Full-time employment guarantees, to an extent, an equivalent of tenure with high job security, good fringe benefits and full participation in the life of departments (Kwiek 2004). In the public sector the weekly average teaching is six to eight hours for full-time faculty whereas in the private sector it may be even 20 hours per week. This itself is an intersectoral contrast of note and probably not an uncommon one. That is, PHE requires more teaching. This in turn relates to the analysis we have of Primary function. PHE is much more teaching-centered. In many conventional analyses of quality, the lack of research is taken as an indicator of low quality. However, PHE can claim that their teaching emphasis may reflect superior quality in the teaching function and it is conceivable that a careful, competitive, well managed PHEI might show more oversight than a public HEI might; in that case it might get higher quality performance from the same professor.

Part-time employees have many fewer privileges than full time employees but still they are employed with social security and other rights and they are not contracted per-hour. In contrast, contracted employees are paid per hour worked and have the least privileges from among the three types of employment. The last group of employees is not reported in the GUS database, which includes numbers of only full-time and part-time faculty members. This obviously limits the scope of our analysis. Moreover, GUS may not exactly present the real number of full/part timers because according to the GUS methodology professors may be listed in several HEIs and counted more than once³¹.

³¹ The GUS methodology section indicates that "In the publication, full-time and part-time academic teachers are listed in terms of full time equivalent jobs. Teachers employed in more than one

Overall, more than 100 thousand full-time and 3,500 part-time academic teachers are employed in the Polish higher education system. 83% of full-time academic teachers are employed in the public sector and 17% are employed by private sector. This finding supports the hypothesis that public sector shows a conventional academic standing well above the private sector since this PHEIs educate over 33% of Poland's total number of students but have only 17% of full-time faculty members.

This major distinction emerges even though data also reflect extraordinary *apparent* similarity between the sectors. That is, private and public sectors have a very similar distribution of full-timers to part-timers: 97% of the public sector's academic teachers are full-time but so are 96% of the private sector's teachers, as table 14 shows. The finding that a very small number of part-time faculty in Polish private definitely does not on the face of it support the PHE literature's statements about intersectoral difference in faculty quality. However, it is important to interpret the findings taking into consideration that the GUS database does not provide information about "true-part timers," who are contracted employees and are paid per hour worked. Presumably, such employees are much more prevalent in the private sector. That is because most PHEIs employ only the minimum number of full-time faculty members required by the law (not an insignificant number). According to the Polish Ministry of Education, if a HEI wants to offer a bachelor program it needs to hire nine full-time faculty members (12 full-time faculty members for a master's degree program) with certain academic ranks and experiences (the requirements may vary by academic discipline). To minimize costs,

school were listed in each of the workplaces." This means that it is not easy to identify the number of fulltime and part-time faculty members because GUS merges them to provide an aggregated number to represent the equivalent of full-time slots Secondly, the total number of full-time faculty members is not a real number of academics because many faculties are counted twice in the GUS database if they have two full-time jobs or one full-time job and one-part time job.

most PHEIs hire a small, required number of full-timers and a large number of "true-part timers" not reported in GUS. Thus, here we appear to have a powerful intersectoral contrast related to faculty quality, but we lack actual numbers to depict the reality.

Also very important is understanding of formal versus real full-time status; this I explore below through interview findings and then the subsequent analysis of primary workplace.

Polish HE	Number of Full-	Percent of Full-	Number of Part-	Percent of Part-
Sectors	time Faculty	time Faculty	time Faculty	time Faculty
Private	17,375	95.6%	792	4.4%
Public	82,691	96.8%	2,777	3.2%
Total	100,066	96.6 %	3,569	3.4%
C	10 2000			

Table 14. Full-time/Part-time Faculty by HE Sector

Source: GUS 2009

Interviews with experts help to explain the differences in structure of employment in private and public sectors and differences in quality of faculty in both sectors in general and specifically on the meaning of full-time and part-time. One of the wellknown scholars (#I) indicates that global "part-timers" are equivalent of Polish part-time contracted staff (paid usually per hour worked). He adds that there is a high share (certainly higher than 50%) of academics who teach mostly in PHEIs and who are not listed or counted in any way in the Polish national database. The scholar emphasizes that the structure of employment in PHEIs is in general a small proportion (usually only the required minimum, to keep cost low) of full-time staff, then a small proportion of "parttime" staff and then a high, over 50% at least, proportion of staff on part-time per-hour contracts. He believes that these true data reflect a serious problem with the quality of faculty in PHEIs taking into consideration the high share of contracted faculty and the low share of full-time faculty. These concerns are supported by other interviewees. They also believe that faculty members may not be sufficiently committed to their jobs in PHEIs because they work primarily elsewhere, including in the public HEIs and treat their second positions in private institutions as additional sources of income rather than a real academic commitment. Interviewees elaborate that even where the same faculty are working in private and public universities, the quality is likely to be lower at the former because the commitment is lower. If a public institution and private institution are not located in the same city or are located in opposite parts of one big city, the faculty may spend substantial time traveling and do not have enough time for staying in private institutions. Also, usually there is no research developed in private institutions; consequently, building collegiality between faculty members is no easy reality to accomplish.

4.7.2.2 Primary Workplace

The distribution of "full-time/part-time" faculty does not adequately illustrate the differences in the faculty or faculty quality in private and public sectors in Poland. The GUS national data greatly exaggerate the time commitment, especially at PHEIs, as I've analyzed above. That is why I go beyond those data to analyze a *primary workplace* indicator. This proves to be much more indicative about faculty time and thus quality and it shows that Poland is indeed in line with global findings, even though a cursory look at full-time/part-time might appear to suggest otherwise.

Fortunately for purposes of our analysis, Polish law requires that faculty members designate which institution is their primary workplace if they are employed in more than one HEI. Multiple employment is very common in Poland. Indeed, the law allows faculty members to hold two "full-time" positions in different higher education institutions at the same time. Consequently, the many faculty members who work full-time in two HEIs (and perhaps part-time in others) indicate which institution is their primary workplace and which one is their second workplace³².

It is important to remember that full-time and part-time faculty members are listed in terms of full time equivalent jobs in GUS. Faculty employed in more than one HEIs are counted twice for the total number of faculty but only once for the primary workplace column. That is why only 58% of faculty is shown as indicating their primary workplaces but they may hold additional positions in other HEIs and be counted twice for total number of faculty. In other words, 42% of faculty work at two or more HEIs and are counted twice for the total number of full-time faculty but only once for the primary workplace column.

Two indicators represent two different concepts: the number of full-time faculty members provides the real number of full-time filled positions whereas the number of the primary workplace tells home many full-time faculty members have one job and how many may have two full-time jobs.

Our findings with regard to primary workplace are dramatic. Out of 17,375 fulltime positions in the private sector only 588 are filled by faculty members for whom the PHEI is the primary workplace. For only 3% of full-time faculty are PHEIs the primary workplaces. Public HEI are the primary workplace for 70% of full-time faculty (See Table 15). This means that for 96% of faculty employed in the private sector PHEIs are

³² Polish HE law is changing in that faculty members who work in two HEIs would have to receive annual consent from the rector of their primary workplace in order to be able to hold their second (full-time) position. This has the potential to undermine PHEIs that are second institutions.

not the primary workplaces whereas for only 30% of faculty from public sector public HEIs are not the primary workplaces.

Polish HE Sectors	Number of Full-time Faculty	Total Employed in Primary Workplace	Percent of Total Employed in Primary Workplace
Private	17,375	588	3.4%
Public	82,691	58,088	70.2%
Both Sectors	100,066	58,676	58.6%

 Table 15. Total Full-time Faculty Employed in Primary Workplace by Sector

Source: Author's calculations GUS 2009

It is also important to remember that although the same faculty members often teach at private and public HEIs, even if they have the same rank they are not necessarily engaged in equal time commitments. The same professor, at the same rank, is not necessarily as dedicated to each institution and probably is more dedicated to the one at which he/she has given his/her "primary" designation--which is in most cases a public HEI.

4.7.3 Conclusion

The primary workplace indicator is decisive in terms of concern over the quality of teaching in private institutions related to multiple-employment of academic staff. Overwhelmingly, faculty sees fit to designate the public HEIs, with guaranteed employment, research funds, and prestige, as their primary workplace. The second-status position of PHEIs indicates that they are treated more as additional sources of income than as important academic positions. And so Poland in fact fits the general global pattern once we penetrate obscuring terminology and select appropriate measures. Multiple-employment in the case of Poland seems to be a parallel indicator to full-time/part-time employment discussed in the global higher education context. Because Poland allows dual full-time –positions, the full-time/part-time indicator is flawed (though still

revealing) to measure quality of faculty body as it is commonly used in global higher education. The primary workplace indicator shows an even greater distinction and it is a valid distinction. Polish private institutions use public faculty members as their main teaching resource but these faculty members designate public institutions as their main workplaces.

4.8 Sources of Funding

I hypothesize that there are intersectoral differences, strong in magnitude, between sources of funding in private and public sectors of HE in Poland. Polish HE follows the global pattern wherein public HEIs are subsidized by Polish government whereas PHEIs depend almost fully on tuitions.

4.8.1 Literature

4.8.1.1 Global Context

The funding structures discussed in the global literature on HE indicate that frequently public institutions are subsidized by the governments whereas private institutions typically depend fully or almost fully on tuitions and related students fees (Levy 1992; Geiger 1986; Levy 1986). These global findings have been confirmed in individual countries, as in Mexico (Silas 2005). Public sectors have traditionally been state funded in most countries, whereas many private sectors of higher education have never received *any* state financial support, or have received only limited governmental help (Levy 2004; Levy 2011; Pachuashvili 2011). In the atypical cases in which states support PHE, they still support public HE much more.

4.8.1.2 Regional Context

Public support for PHE has been very rare in Eastern Europe, although the existence of it in some countries shows a trend of growing acceptance of PHE. The evaluation of sources of HE institution revenues for teaching and research indicates that most PHE sectors are heavily dependent for their survival on the income from tuition fees (Fried, Glass, and Baumgartl 2007). Analysis of data presented by Fried, Glass, and Baumgartl³³ (2007)on revenue sources shows that private sectors in Eastern European countries³⁴ receive from 0%-only 3.5% of revenues for teaching and research activities from state/public funds .

4.8.1.3 Poland Literature

The funding structures of private and public higher education sectors are discussed by several scholars of Polish HE (Kwiek 2009b; Dabrowa-Szefler and Jablecka-Pryslopska 2006; Jablecka 2007b). They emphasize that private institutions derive their income from tuition revenues whereas public institutions derive their income from governmental subsidies. Since 2005, HEIs can receive funding not only from the government and from tuitions but also from local government (districts), non-governmental funding for commissioned projects, and from international programs. However, the percent of funding from these additional sources is limited in both sectors. A notably contrasting feature between privates and publics HEIs lies in access to public funding for which only public HEIs are entitled. Since 2001 PHEIs have access to the public financial assistance

³³ Fried, Glass, and Baumgartl (2007) summarize PHE findings for the European countries but I extracted only data referring to Eastern Europe.

³⁴ Eastern European countries included in the study: Albania, Bulgaria, Estonia, Poland, Romania, Russia, and Ukraine.

of their students but still they do not receive public subsidies which can be used to cover teaching activities and cannot receive the non-competitive public subsidies for research.

4.8.2 Findings

The analysis of GUS data supports the hypothesis that there are significant differences in funding structure between the public and private HE sectors in Poland. I analyze three dual sector quantitative indicators to test the hypothesis: percentages of income, funds for teaching activity, and funds for research activities. The compilation and analysis of these three indicators gives us a more systematic analysis than found in prior work on Polish PHE and intersectoral finance. After evaluating the three indicators based on the national database, I present testimony from interviews about the funding structures of public and private sectors. The indicators selected for the Polish case adequately test the hypothesis generated from the literature's findings. The indicators are strong ones and are frequently used in the general higher education literature to evaluate the funding of HEI globally. They clearly illustrate the sources and distribution of funds for the private and publics HE sectors for the Polish case.

4.8.2.1 Private and public percentages of income

The sectors have very different sources of funding: publics receive 74% of their funds as subsidies from government, 0.3% from funds from district budget and other public funds, and 8% from others funds. In contract, privates receive only 6% funds as subsidies from the central government budget, 0.2% funds from district budgets and other public funds, and 4% funds from other sources. Obviously the most important intersectoral contrast lies in central government subsidization but the contrast in funds from "other sources" is also proportionally large. Whereas the contrast in the former is in the predictable direction, the

contrast in the latter is not predictable and, unfortunately, the national database does not define "other sources." In many national databases, other sources mostly refer to non-government and non-tuition funds and are proportionally larger for the private than the public sector³⁵.

As table 16 shows, only 18% of funds for teaching activities³⁶ in public HEIs come from fees for teaching activities whereas 89% of funds in privates come from fees for teaching activities. This finding also supports the main funding hypothesis.

Table 16. Sources of Funding in Polish Private and Public HE Sectors in 2009

Polish HE Sectors	Subsidies from Central Gov't Budget	Funds from District Budgets and Other Public Funds	Fees for Teaching Activities	Others*	Total
Private	6.5%	0.2%	88.5%	4.8%	100.0%
Public	74.0%	0.3%	17.5%	8.2%	100.0%

Source: GUS 2009

*Other sources of funding not defined by GUS

4.8.2.2 Funds for teaching activities

The more detailed analysis of the sources of funds for teaching activities further supports the hypothesis about different funding patterns between private and public sectors in Poland. Table 16 presented overall sources of funding in private and public sectors without looking at the distribution of funding by teaching and research. In contrast, table 17 presents the sources of funding spent specifically on teaching. Most of the governmental subsidies from budget for teaching activity are consumed by the public sector, 98%, whereas private institutions receive only 2% of those public funds.

³⁵ Although work on the region and beyond has sometimes pointed to local government as a resource help to PHE, the Polish national database shows only tiny allocations for either sector.

³⁶ The national database use of the wording the "revenues from teaching activities" is in effect close to a category of "funds for teaching activities," which included the subsides from the central government budget, funds from district budgets, other public funds, fees for teaching activities, and other funds (not defined in the national database).

Overall, as table 17 shows, the public sector utilizes 82% of total teaching activities funds while educating 67% of students whereas the private sector utilizes 18% of total teaching activities funds while educating 33% of students. These funds include not only public subsidies but also funds from the district budgets, fees for teaching, and other funds. The low percentage of funds spent by private institutions may be an indicator of lower quality provided by PHEIs. So even for its primary function, PHE invests much less than the public sector does. On the contrary, others can see the fact that PHEI spends less per pupil as an indicator of efficiency: private over public. This is a classic privatepublic contrast and debate.

Table 17. Funds for Teaching Activity in Polish Private and Public HE Sectors in 2009

Polish HE	Total	Of which			
Sectors	Teaching	Subsidies from	Funds from District	Fees for	Others*
	Activity	Budget	Budget and Other	Teaching	
	Funds		Public Funds	Activities	
Private	18.3%	1.9%	16.6%	53.1%	11.6%
Public	81.7%	98.1%	83.4%	46.9%	88.4%
Total	100.0%	100%	100%	100%	100%

Source: GUS 2009

*Other sources of funding not defined by GUS

4.8.2.3 Funds for research activities

The analysis of funds for research activities even further supports the hypothesis that the private sector does not receive much financial support from the government. The great majority of the funds for research activities is consumed by public sector (See Table 18). This of course also relates to our findings on the Primary function of the two contrasting sectors, with the public sector dominating in research. For all funding categories except the *funds for realization of appropriated* projects public HE spends over 90% of HE's funds. Only for the *funds for realization of appropriated of appropriated & the minister's column*? and

available funds.

Polish	Research	Of whic	h Funds fo	or						
HE	Activity	Financ	Of whic	h	Resear	Develo	Approp	Financ	Sales of	Minist
Sectors	funds	ing Statute Activit	Alloca tions on	Funds for Assistin	ch Projec ts	pment Projects	riated Projects	ing Intern ational	Other Experime ntal	er Projec ts
		у	own Resear ch	g Researc h Activity				Coope ratives	Research and Developm ent	
Private	2.3%	0.9%	2.0%	5.3%	3.3%	2.0%	12.3%	3.9 %	0.4 %	8.9%
Public	97.7%	99.1%	98.0%	94.7%	96.7%	98.0 %	87.7 %	96.1%	99.6 %	91.1%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
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Table 18. Funds for Research Activity in Polish Private and Public HE Sectors in 2009

Source: GUS 2009

To the above statistical analysis of data on the sources of funding and the distribution of funds in private and public sectors I add expert testimony in interviews about the funding patterns in both sectors. The testimony not only supports my hypothesis that Polish HE follows the global pattern and public institutions are subsidized by Polish government whereas private institutions depend almost fully on tuitions. It also indicates that this reality is clearly recognized, which of course is not to say that all our sub-categories, distinctions, and specific data are. The nationally well-known professor #I emphasizes that PHEIs base their funds on tuitions and fees and do not receive much of the governmental financial support. In contrast, public institutions not only receive governmental money for teaching but also for research activities in the form of non-competitive and competitive grants. PHEIs may compete with publics for the competitive governmental grants but in most of the cases publics win and receive the research funding. The limitations of access to the governmental funds for PHEIs are also reflected upon by the interviewee #C, a president of a top private university. The president

emphasizes that his university cannot compete with many Western European universities because the university is not wealthy enough due to the fact that all its funds come from "the market"-- meaning tuition and fees paid by students. In this situation, the university does not have "soft money" and is strongly dependent on a market which is very price sensitive.

4.8.3 Conclusion

The analysis of Sources of funds in the private and public sectors clearly shows that there are decisive intersectoral differences between sectors. The public sector is strongly subsidized by the government whereas the private sector receives only marginal governmental funds. These findings are consistent with the global literature. Moreover, Polish PHEIs generate most of their revenue from tuitions and fees, and spend a very limited amount of funds on research. These findings support the results of my analysis discussed above in this chapter of Primary function of the private and public sector. Again it is visible that PHEIs focus on teaching, which brings their revenue, whereas public HEIs, which receive governmental money are responsible for conducting research.

4.9 International Orientation

The hypothesis generated from the literature's findings is that the private sector is more internationally oriented than the public sector.

4.9.1 Literature

4.9.1.1 Global Context

The differences between internationalism of private and public HE sectors have hardly been discussed. This makes internationalism unique among my eight investigated matters. Levy (2004) emphasizes that some HEIs build their legitimacy through their links with organizations such as a British university or a U.S. regional accrediting agency. In Argentina, these alternative methods of increasing legitimacy have been more powerful for private than public higher education. Similarly, Levy (2009) states that private semi-elite institutions tend to be Western-oriented, even U.S oriented. This trend is visible via established partnerships programs between semi-elite and foreign HEIs as well as via opening exchanged programs and offering lectures in foreign languages (Levy 2007; Levy 2009). Overall, public HEIs tend to be more nationally oriented institutions with PHEIs less so and perhaps correspondingly with more international orientation (Levy 2007).

4.9.1.2 Regional Context

Nor are differences in international orientation between PHEIs and public HEIs explored in literature on Eastern Europe. But Slantcheva and Levy (2007) tackle the matter in terms of international vs. national legitimacy. International organizations and associations are often sources of external influence on PHEIs in Eastern Europe and can be classified as alternative sources of legitimacy. The authors emphasize that a large percentage of private intuitions have partnerships with international organizations, offer joint programs, and provide foreign modes of education in order to increase their legitimacy. Moreover, it is not clear that the international reach is confined to top-ranked private institutions in the region.

4.9.1.3 Poland Literature

The topic of the differences of international orientation of the private and public HEIs is not discussed in the Polish literature. The international orientation of some PHEIs is mentioned by Jablecka (2007a) in her discussion of the methods used for increasing legitimacy by PHEIs in Poland. The overall low international orientation of *both* private and public sectors is mentioned in the Ernst and Young report (2009) where the authors emphasize that the internationalization is not a strong characteristic of Polish HE because many HEIs are not ready to send their students for exchange programs or receive international students or scholars. In terms of international mobility of faculty members, Kwiek (2004) emphasizes that international mobility of Polish academics is increasing rapidly but is restricted to leading public research universities and to a relatively small percentage of academics. Thus, it appears that international ties are limited for the HE system overall, with the public peak forming the major possible exception.

4.9.2 Findings

There are at least a few indicators discussed in the PHE literature which are used to measure International orientation of HEIs. For example, Levy has written about various international links, including for accreditation, and has written about signals PHEIs try to give by putting internationally charged words into their names, and the way they advertise. But more indicators of internationalism are found in the wider higher education literature. These include international partnerships, joint programs, and mobility of faculty members as important indicators of internationalism. Unfortunately, these indicators cannot be used for comparison of the private and public sectors in the Polish case due to a lack of availability of data on these indicators. But another common indicator is usable in the Polish case: number of international students. Indeed we are able to complement that measure with data on the number of international students graduated. These indicators are important, though not sufficiently comprehensive to

reveal the whole picture of differences between internationalism of the private and public sectors.

Thus, for this hypothesis the indicators are small since they only include international enrollment and number of international graduates. There is a large gap between hypothesis and adequacy of indicators, so that even if the data on the indicators are good we can draw only limited conclusions about the hypothesis. However, there is an additional importance to analyzing even these limited indicators. This concerns the fact that International orientation of the top-ranked PHEIs is investigated more closely in chapter 5. Although the private-public comparison on internationalism is limited, it helps builds a context for the analysis that follows in chapter 5.

The findings here show that both private and public sectors have only limited internationalism on both of our two indicators: share of enrollment and share of graduates. In both sectors the international share of enrollment is below 1% (See Table 19). The percentage for the public sector is higher than the percentage for the private sector but the difference is so small that it cannot strongly contradict the hypothesis about intersectoral differences in international orientation of HEIs.

As small as the intersectoral difference is regarding enrollment, it virtually vanishes when it comes to graduates. In fact the share of international graduates is below 0.5% for both sectors. Here the intersectoral difference is almost non-existent. Why the international share is lower in graduation than even in enrollment is not evident from my analysis³⁷.

³⁷ It is difficult to explain the low graduation rate of international students. The Polish literature does not mention much (almost anything) about international students in the private and public sectors. I can speculate that international students do not plan to earn Polish degrees because many of them come for exchange programs which are usually one or two semesters long.

	Total Int'l	International Share	International Share
Polish HE Sector	Enrollment	of Total Enrollment	of Total Graduates
Private	633,097	0.69%	0.12%
Public	1,266,917	0.99%	0.11%
Total	1,900,014	0.89%	0.12%

Table 19. International Student Share of Enrollment and Graduates by HE Sectors

Source: Author's calculations GUS Data 2009

Another way to interpret the findings is to evaluate the distribution of the international students between the sectors. This indicates that the sectors have similar shares of international students to their overall percentage of enrollment but also that it is the public sector that holds a slight edge. Respectively, the public sector educates 67% of all students and 73% of all international students whereas the private sector educates 33% of all students and 26% of all international students (See Table 20). If these findings show that the public sector has more international students in relation to total enrollment than private sector, they show only a small difference. I speculate that some of the reason that the private sector relatively holds its own in share of international students, despite the sector's generally inferior standing on academic quality indicators, has to do with the legitimacy factors noted above and factors related to being entrepreneurial, seeking novel avenues, and looking toward unconventional markets by some of the PHEIs.

In regard to international representation among those graduating, again the salient dual sector point is that the presence is very low in both sectors. In fact it is below 0.5%. Here the intersectoral difference is almost zero. On the one hand, the hypothesis about private international orientation is not confirmed but on the other hand it is not heavily contradicted either. Indeed PHE does a bit better in graduation than in enrollment and its share slightly exceeds its share of overall enrollment, making it more international than the public sector on this indicator³⁸.

	Number of		Number of		
Polish HE Sector	International Students	%	International Graduates	%	
Private	4,425	26.0%	817	37.0%	
Public	12,575	74.0%	1,393	63.0%	
Total	17,000	100%	2,210	100%	

Table 20. Number and Percent of International Students and International Graduates by

 HE Sectors

Source: Author's calculations GUS data 2009

The topic of enrollment of international students in the private and public sectors was not discussed in depth during the interviews. One interviewee (#I) emphasizes that most of international students who study in Poland are enrolled in medical programs offered by public HEIs. That is because studying medicine in Poland is less expensive than in European counties like Germany or France. PHEIs do not offer medical programs and they are only able to attract relatively few international students, those who may be interested in studying in large cities like Warsaw or Krakow. A similar view is presented by the Fulbright specialist who highlights that most of the Fulbright international students and scholars want to visit the best known Polish public HEIs. From the whole private sector only a few institutions are able to attract international Fulbright scholars and students.

³⁸ There is no easy explanation why the percentage of international graduates in PHEIs is slightly higher than the percentage of international graduates in public HEIs. It is possible that international students choose different types of programs and have different expectation in terms of graduation from private vs. public HEIs. Probably, top PHEIs offer certain type of programs like MBA programs which attract international students from Eastern Europe who want to earn a degree from good Polish PHEIs. In contrast some international students who come to study at public HEIs may want to study program like medicine (not available at PHEIs), which is considered to be one of the toughest programs. It is also possible that public HEIs offer more short exchange programs (without offering degrees) for international students whereas PHEIs offer more fast paced business programs (with a degree).

4.9.3 Conclusion

The findings indicate that there is little intersectoral difference when it comes to either of our indicators: international enrollment and international graduates. Evaluation of the indicators shows that public HEIs have a slightly higher percentage of international students and international graduates than PHEIs. These findings do not support the hypothesis that PHEIs are more internationally oriented than public HEIs.

Furthermore, it is important to remember that other indicators should be used for evaluation of international orientation of HEIs so that my two indicators only limitedly could support or contradict the hypothesis even had the data shown a sharp intersectoral difference. It is possible that evaluation of other indicators discussed in the HE literature like number of international partnerships or exchange programs could indicate whether PHEIs are more involved in internationalism than public HEIs in Poland. Thus, internationalism is the one of our eight subjects in which the intersectoral hypothesis fares poorly in both respects: our indicators are inadequate to measuring the hypothesis and the data we review on those indicators do not indicate more than a marginal intersectoral difference—which, in any case, is not in the predicted direction.

4.10 Conclusion

Overwhelmingly, the findings and discussions in chapter r emphasize powerful intersectoral differences in Polish HE. For the most part, the hypotheses stated based on the evaluation of literatures' findings and claims are supported by findings on the intersectoral differences. These findings echo prior literature where PHEIs are often described as, for example, small, focused on soft fields, and concentrated in terms of range of offered programs. All this contrasts to public HEIs, which are described as

having higher enrollments, offering programs in numerous fields including core science fields, and having a broad spectrum of offered programs. These findings fit well to the global literature, which is by far the most extensive and developed PHE literature. In addition, the new findings confirm assumptions presented in the Polish literature that PHEIs tend to have less selective student bodies than public HEIs. In terms of finance, Polish PHEIs depend on tuition and fees the most and have only limited other sources of funds in contrast to public HEIs, which are still highly subsidized by the government and have some diverse sources of funds. Again, my findings are consistent with the literature's findings on finance of private and public sectors globally.

For all eight hypotheses I have analyzed the intersectoral differences based on comparisons of sectoral averages. Additionally for two hypotheses (Enrollment size and Concentration of institutional offerings, I have used data on indicators (average Enrollment size of HEIs and average number of academic disciplines offer per HEI) that go beyond sectoral averages to data by each institution, thus allowing further conclusions about magnitudes of significant private-public differences.

Some of my hypotheses are strongly confirmed. Others are confirmed to a lesser extent, and for only one hypothesis (International Orientation) my indicators and data are not sufficient to confirm or disconfirm the hypothesis. Four of the eight hypotheses are strongly supported through my indicators and data. These hypotheses are on Enrollment size, Field subject matter, Concentration of institutional offerings, and Sources of funding. Three other hypotheses are less strongly supported, either because the indicators are not comprehensive or because the data show only moderate intersectoral differences. These three hypotheses concern Primary function, Student quality, and Faculty quality.

I was able to identify and employ persuasive indicators, i.e., indicators that allow us to assess the hypotheses, and my analyses are more in depth than previous findings in the PHE literature. The tested indicators measure the breadth of several hypotheses. These hypotheses include Enrollment size, evaluation of the Field subject matter, Concentration of institutional offerings, and the Sources of funding for the private and public sectors. In the case of Field subject matter, the strong indicators of enrollment in field and subfield of studies are used to explore intersectoral differences. Similarly, for the hypotheses on Sources of funding, Concentration of institutional offerings, and the Sources of funds my selected indicators adequately test the hypothesis generated from the literatures' findings. For other factors, however, my indicators are limited or even very limited; consequently, further research is needed in order to make comprehensive conclusions for the Polish case. The very limited situation occurs for evaluation of the internationalism of the private and public sectors where I analyze only the percentages of international students and graduates. However, the higher education literature provides a list of additional important indicators--for which data are not available for the Polish case--that may be used to measure International orientation of HEIs.

In summary, for all my hypotheses besides the one on internationalism, I present indicators adequate for gauging my hypotheses about intersectoral differences. Additionally, I had already endeavored to select indicators for which I could have adequate Polish data. Thus, in the end, my data are inadequate for only one indicator -percentage of full/part time faculty (as the GUS database does not provide a count of "true" part-time faculty).

This chapter contributes to general literature on PHE in several ways. First, it includes eight hypotheses that I systematically derived from global and theoretical literature and applies them empirically to the Polish national case. In application, I introduce and refine indicators, usually statistical indicators, to use to be able to measure reality on the hypotheses in question. For some factors wholly new indicators are used to test the stated hypotheses for the Polish case. In addition, I present and analyze systematic national data on most of the hypotheses. Such a process is at best sporadic in the extant literature. Moreover, I use more recent and comprehensive Polish data to test the hypotheses than have been used previously in the Polish literature. In both methodology and substantive findings we have explored private-public distinctiveness with breadth and data that go beyond what the PHE literature has managed in more than a couple of national cases anywhere. The findings from the effort strongly substantiate the overall hypothesis that intersectoral differences are major.

Chapter 5 : Intrasectoral Distinctiveness

5.1 Introduction

Chapter 4 found overwhelming evidence of the relatively close fit of globally discovered and defined intersectoral rules to the Polish case. Thus we know what differences between private and public sectors on average for Polish case are. However, whenever there is an average there may be important variation around it. Chapter 5 proceeds to explore the degree and nature of possible variation on the upper end of the private sector.

Thus the coupling of analysis from chapter 4 and Levy's publications (2008c; Levy 2009b; Levy 2010b) on intrasectoral differences within private sectors globally led to a fundamental question: is there a group of private institutions that differ from the private sector in Poland? This question relates, as discussed by Levy, to the concepts of finance, governance, and function of PHEIs but I proceed to dissect also to concepts and variables like size, sources of funds, fields of study, and employment and enrollment patterns. Such characteristics may be used to test for the sort of distinctiveness among PHEIs postulated in Levy's conception of "semi-elite" (2008c) as it might have been for any of his three categories (all still evolving in usage): religious-cultural, elite/semi-elite, and demand absorbing/non-elite. As defined by Levy (2008c; 2009b; 2010) semi-elite institutions are private HEIs which have good reputations and lie somewhere between elite and non-elite institutions in the institutional hierarchy of HE. Common characteristics of semi-elite institutions would include high academic and serious attention to teaching while aspiring to be leading institutions nationally. Moreover, semielites are economically oriented with international profiles and Western-orientations. In terms of students semi-elites are selective in admissions policy and are inclined to enroll

students with high social class who can afford paying ample tuition. They are high in privateness in terms of finance, governance, and function (Levy 2009b; Levy 2010a). From these possibilities, I decided to analyze characteristics of the upper end of the private sector, thus giving full focus to top-ranked PHEIs in Poland. The big frame of intrasectoral PHEIs variation is not a question only for the Polish case, but can be expanded into many Eastern Europe countries and indeed globally.

This chapter thus tackles the question of intrasectoral distinctiveness in Polish PHE, answering how Polish top-ranked PHEIs differ from average PHEIs. The analysis in this chapter helps to answer ensuing questions basically on how the top-ranked compare to average PHEIs but, in some instances, also how they differ from public sector averages. Again, my formulations here derive from a mixing of my chapter 4 findings on Polish intersectoral differences with Levy's notions about possible intrasectoral differences, particularly in regard to his proposed semi-elite category.

I hypothesized (in chapter 3) that top-ranked PHEIs and average PHEIs are very different from one another in Poland. Moreover, I made eight specific hypotheses, all under that overarching hypothesis, spelling out key characteristics of this difference. Those characteristics work mostly from the emerging notion of "semi-elite" private universities (Levy 2008a; Levy 2009b; Levy 2010a). Each of my semi-elite hypotheses suggests that the surveyed PHEIs are in between average private and public *and are so in ways that mark certain characteristics distinctive from those in the typical PHEIs*.

Additionally, I make a two-part modality explicit and prominent in three of the eight hypotheses. For these three hypotheses I am asserting that the top-ranked are a great deal like the private average. The great closeness to PHE average part of the hypothesis is

based on the literature. The two-part motif always is (a) top-ranked PHEIs are mostly like the private sector overall but (b) less so, including sometimes being more like the public sector than is the private sector overall.

The selection of top-ranked PHEIs is based on the Rzeczpospolita and Perspektywy ranking, which uses 23 criteria to rank PHEIs³⁹. The top-ranked PHEIs are compared to the average PHEIs (excluding the top-ranked) or to the private sector overall. Although our hypotheses in chapter 5 are intrasectoral, they also partly compare to the public sector average. Since the public average is superior to the private average on many indicators, such as quality ones, our intrasectoral hypotheses would be especially decisively confirmed if the top-ranked PHEIs exceed or at least approximate the public average. In those instances, the top-ranked PHEIs might still sit below the top-ranked public HEIs (but we have no surveying or other database separating out the public leaders).

Data Sources

For all eight hypotheses, I use quantitative data. I supplement this, especially where I lack GUS or other quantitative data other than that in my own survey, with interviews with experts as well as with pertinent literature. The survey is used to collect data from top-ranked PHEIs in Poland.

³⁹ The explanation of specifications of the ranking is important in order to demonstrate that analyses included in chapter 5 do not repeat rankings' methodology and findings. The ranking does not provide explanations or indicators of its terms or concepts but it provides general terms like "professional development of academics" or "accreditations" or "internationalizations." The ranking is composed of two main categories of factors: the first category includes factors/concepts that focus on the academic strength of HEIs and the second includes factors/concepts related to 'condition of studying' like number of library volumes etc. I do test some of these concepts from the first group, such as the right to offer PhDs, but I do not test concepts from the second group. The Rzeczpospolita and Perspektywy terms or concepts only to a certain degree overlap the constructs in my dissertation; the indicators are usually different or in some cases they are not identified. Consequently, my analyses are not just engaging in circularity: using the Rzeczpospolita and Perspektywy ranking to select my sample, and then using the same indicators as the ranking to say that these institutions really high scoring.

The GUS database provides raw data for the whole sectors (private and public) or data for individual institutions (public or private HEIs). For my analyses, I calculate averages/percentages for the private or public sectors, and averages/percentages for a group of institutions, for example, averages for 20 top-ranked PHEIs.

In many cases, the statements of interviewees likely capture at least efforts made by top-ranked institutions. The interviews include information from my discussions with ten important people from the Polish higher education system. The interviewees include presidents of private colleges, ex-presidents, scholars, a representative from the Fulbright commission, and government representatives. The interviews are based on open-ended questions and in-depth discussions.

As an additional source of information to the qualitative analysis, interviews play a more prominent role in chapter 5 than they did in chapter 4. Readers of course have liberty to weigh the interview information as they judge suitable. The statements of experts are informed views not necessarily based on hard numbers so they are not fully reliable substitutes for quantitative data.

Throughout the chapter, I present for some hypotheses first data for the nine (topranked) surveyed PHEIs and then for the country's 20 top-ranked PHEIs .The latter obviously covers more ground but it is the former that I am studying up close; it is the former on which I have survey information that goes beyond the dimensions that can be measured for all 20 institutions and on which I employ interviews as well. In other words, for some hypotheses in chapter 5, I analyze data not only for the nine surveyed institutions but also data from GUS for the 20 top-ranked PHEIs. Thus, I present a separate analysis for the nine surveyed institutions and then provide data on the 20

top-ranked PHEIs including the nine institutions⁴⁰. My reporting on the 20 PHEIs basically follows the flow of my report of the nine surveyed PHEIs.

There are a few reasons for presenting data for the nine and 20 PHEIs. First, although the data are frequently quite parallel, the comparisons of data become methodological checks on institutional reporting and its veracity. Secondly, the data from the survey are more updated than data from GUS so keeping both tables allows comparisons for the different years. Additionally, only for some indicators do I have data from two sources; for other indicators I have data only from the survey or only from the GUS. By keeping both tables I can make comparisons between indicators.

Literature and Hypotheses

The new but very limited literature on the semi-elite HEIs partially provides potential hypotheses (Levy, 2009) but without specificity, explicitness, and conciseness. This literature is used by me to formulate my own explicit, specific hypotheses on each of eight major characteristics for the Polish case. Thus, there is a different nature of literature-to- hypotheses routes in chapters 4 and 5. In this chapter the literature is very limited but includes more direct information about possible hypotheses. In contrast, the literature drawn on for chapter 4 was much broader and extensive in content but very limited insofar as providing hypotheses or indicators for analyzing (intersectoral) differences. A constant between this chapter and the previous one lies in my use of the literature's claimed *findings* to generate specific hypotheses about Polish intrasectoral and intersectoral differences.

 $^{^{40}}$ There are some differences between data from my survey and from GUS where the years of reporting are different for the two data sources.

The literature on semi-elite institutions is restated only briefly in chapter 5, because its main elements have been presented in earlier chapters: the introduction to the semi-elite concept in chapter 1, the literature review in chapter 2, and, most tightly linked to my present undertaking, the development of hypotheses in chapter 3.

As stated, my overarching hypothesis for this chapter is that intrasectoral distinctiveness is widespread and strong between top-ranked and average Polish PHEIs. Semi-elite institutions would be in between average private and public ones but they would also have to have identifiably distinctive characteristics.

The component hypotheses on each potential characteristic of the top-ranked institutions are based essentially on what the emerging literature on semi-elite has proposed and found, but tweaked by me to form explicit hypotheses to explore with data. For each of the eight hypotheses I develop indicators and integrate data into the analysis.

Accordingly, eight component hypotheses form the core of this chapter. They deal with the following:

- Enrollment size
- Primary function
- Concentration of institutional offerings
- Field subject matter
- Student quality
- Faculty quality
- Funding sources
- International orientation.

These are of course essentially the same eight topics considered in chapter 4's exploration of *inter*sectoral differences. Whereas the hypotheses and explanations about

the hypotheses were presented in chapter 3, in chapter 5 I briefly re-state each hypothesis when I proceed to analyze it and present my findings on it.

Indicators

As in chapter 4, I present data without need of any invented indicator on just one hypothesis, that on Enrollment size, but for all other hypotheses what I want to gauge is a concept, for which there is no pure statistical representation. Thus I select or develop indirect indicators for these hypotheses.

Some indicators used in chapter 4 can be re-employed in chapter 5. But some used in 4 cannot be used in 5. That is because of the lack of data on individual institutions where data are available for the sectors. For example, the indicator of number of international graduates was used in chapter 4 but is not part of chapter 5.

In other cases, however, I introduce indicators in chapter 5 that were not used in chapter 4. This is possible because my survey provides data on these indicators whereas similar data are not available by sector. For example, the tuition and fees indicator is used to measure quality of the student body in chapter 5 but this indicator is not used in chapter 4 because neither GUS nor the ministry provides that data by HE sectors. I have for this indicator data on the surveyed institutions and I have interview comments but I cannot directly compare them with the PHE average.

The uniform layout for each hypothesis continues from the stated hypothesis to my indicators and data and on to my findings. My information comes principally from analysis of the Polish national database (GUS), my survey, and qualitative information from face-to-face interviews. Various publications and institutions' websites are supplementary sources. Taken together these sources lead to my major findings about

intrasectoral differences. These findings are interwoven, again for each of the eight hypotheses, with analytical discussions to better understand the differences, as well as some similarities, between top-ranked and average PHEIs.

5.2 Findings

5.2.1 Enrollment Size

Based on the revised version of the semi-elite formulation I hypothesized that Polish topranked PHEIs are larger than average PHEIs. And I strengthened the hypothesis in expectation that not only are there intrasectoral differences but that they are strong in magnitude such that top-ranked PHEIs are much larger than average PHEIs. My double hypothesis rests principally on Levy's reformulation and the most thorough national study until now of this subsector, which indeed found these institutions to be much larger than average private ones (Praphamontripon 2010).

According to the HE literature, enrollment size is an important characteristic, itself leading to other important organizational characteristics (Cohen 2003). Logically, then it is worth studying for PHEIs and in turn to explore for possibly semi-elite institutions. The original draft of Levy's working paper defining semi-elite hypothesized that these institutions might be small, based on being niche-focused and selective. The findings below on field concentration will analyze the niche reality but certainly the high selectivity that is definitional to the semi-elite notion could be seen as a predisposition to small size. However, not only the Thai but also the Turkish case show semi-elite as larger—indeed far larger-- than the average private PHEIs⁴¹. For semi-elite undertakings perhaps a critical mass, economies of scale, and cross-nurturing among units is important.

Besides comparing top-ranked PHEIs to the private sector on number of students this chapter analyzes also student full-time equivalent⁴² (FTE) in both groups. That is because the institutional research literature indicates that FTE is a better representation of enrollment size than is headcount. FTE is a standard measurement that is used in benchmarking or peer comparisons in the institutional research field in United States (Szelest 1996; Zhao and Dean 1997; Weeks, Puckett, and Daron 2000; Xu 2008; Gaylor 2009; Nzeukou and Muntal 2010; Musial-Demurat and Szelest 2011). Here I only analyze FTE to evaluate more accurately enrollment size of individual institutions; however, distribution of full-time and part-time students is discussed in detail under the Student quality hypothesis.

5.2.1.1 Indicators

The institutional enrollment size is used to evaluate the differences between the topranked and average PHEIs. Exactly as in chapter 4, Enrollment size forms the only hypothesis for which I do not use true indicators for I am not dealing with an abstract concept. Uniquely on Enrollment size I have direct measurement since enrollment is a concrete matter, not a concept. The same measurement is used in chapter 4 for evaluation of intersectoral enrollment size and in this chapter for intrasectoral size differences between the top-ranked and average PHEIs.

⁴¹ It is important that we not automatically construe "small" in one study to equate with "small" in another. For example, the Thai study (Praphamontripong 2010) identifies its large PHEIs as having at least 7,000 full time equivalent students. That cutoff point might be unduly high for other countries, where even a few thousand might be relatively large.

⁴² The student full-time equivalent (FTE) is calculated based on numbers of enrolled full-time and part-time students. FTE is calculated by adding numbers of full-time students and one-half of the numbers of part-time students.

Although our measure of size differences is solid, we must note in the Polish case that total enrollment is presented (in the GUS database) without differentiation between part-time and full-time students. This is an issue that bedevils both intra and intersectoral analyses in the PHE literature. It is widely assumed that the share of part-time students is generally highest in the low-quality PHEIs but empirical evidence is lacking. Thus, I provide and work with FTE data as well and analyze both the GUS overall data and the more discriminating (FTE) data. The FTE is calculated based on the GUS numbers for the private averages and based on the returns from our surveyed PHEIs.

5.2.1.2 Enrollment size

The findings clearly illustrate that there are intrasectoral differences within the private sector. The nine surveyed top-ranked PHEIs have 8% of total enrollment in PHE sector and a mean enrollment of 5,658. This is almost three times more than the mean (1,918) of all 330 PHEIs (the mean average for the private sector without the nine surveyed PHEIs is 1,813).

There is a wide range among the surveyed institutions. Institution #B has enrollment of almost 12,000 whereas Institution #T has enrolment below 1,000. But we do not see a pattern of the higher ranked of our sampled institutions being much larger than the lower ranked of the sampled institutions⁴³. In other words, there is no correlation within our surveyed group between rank of an institution and its enrollment. All in all, 5 out of 9 (55%) surveyed PHEIs have enrollment below 5,000 and four out of nine (45%)

 $^{^{43}}$ My analysis does not show a direct relation between sizes of schools and their rank among the 20 top-ranked PHEIs. Among these institutions some are very small, such as the one ranked #L, with less than 500 students, whereas others are large, such as #N, with more than 16,000 students. Also if I add colleges ranked from 1-11 the total enrollment is almost identical to the total enrollment of colleges ranked 12-21.

have enrollment above 5,000 students but of course 5000 is a high demarcation point given that the average Polish PHEI is below 2000.

As forewarned above, however, the data just analyzed include the total enrollment for the surveyed PHEIs without taking into consideration the percentages of full-timers versus part-timers. If we take into consideration the distribution of full-time and part-time students then student FTE (full-time equivalent) for the surveyed PHEIs equals 33,816 and for the private sector equals 371,683. As the 9 surveyed PHEIs, which comprise only 3% of the 330 PHEIs educate 8% of the private students (50,923) unadjusted, so they educate 9% of private students in terms of FTE (See Table 21). In other words the nine surveyed PHEIs educate 9% of students enrolled in the private sector when we control for the number of full-timers and part-timers. In fact, we might be surprised that the FTE share would not be much higher than the unadjusted share, but the key fact is that the surveyed institutions are about three times the enrollment size of unadjusted average PHEI and even more than three times larger of adjusted average PHEI.

Private HE Institutions	Number of	FTE Number
	Students	
Institution #A	5,739	4,205
Institution #B	11,903	8,951
Institution #F	3,958	3,083
Institution #H	4,244	2,633
Institution #I	1,595	1,152
Institution #P	8,657	4,833
Institution #R	9,336	5,873
Institution #S	4,506	2,562
Institution #T	985	524
Average Enrollment of		
Surveyed Institutions	5,658	3,757
Total Surveyed Institutions	50,923	33,816
Source: Author's calculation	ns Survey Data	2009/2010

Source: Author's calculations Survey Data 2009/2010

Furthermore, the GUS database allows the evaluation of enrollment in the topranked twenty PHEIs. These 20 have 20% of total private sector enrollment⁴⁴. The average enrollment in the top twenty institutions is higher by 750 students than the average enrollment in the surveyed PHEIs. There is also a difference in the variation within the two groups. The top 20 PHEIs have higher a standard deviation (SD - 4,612) than the surveyed PHEIs (SD-3,642). This finding indicates that there is more variation of enrollment in the group of the top 20 PHEIs than in the group of the surveyed PHEIs. Consequently, the larger the pool of top-ranked PHEIs the more complications with establishing average enrollment size--adding more top-ranked PHEIs into the pool increases the size diversity of them. But is also the pool's average enrollment size, thus strengthening the support of the size hypothesis.

⁴⁴ Data for the surveyed institutions are taken from GUS for this analysis but they are not much different from the surveyed data in the case of the surveyed institutions.

Private HE Institutions	Total Number of	Total FTE
	Students	
Institution #A	6,016	4,374
Institution #B	11,350	8,662
Institution #C	5,025	2,662
Institution #D	2,814	2,149
Institution #F	4,300	3,283
Institution #G	2,025	1,059
Institution #H	4,477	2,766
Institution #I	1,406	1,124
Institution #J	11,165	6,287
Institution #K	15,751	8,663
Institution #L	421	421
Institution #M	3,787	2,075
Institution #N	16,132	11,148
Institution #O	10,680	6,354
Institution #P	7,458	4,157
Institution #Q	6,034	3,423
Institution #R	9,552	5,890
Institution #S	5,050	2,943
Institution #T	1,112	606
Institution #U	3,996	2,519
Average Enrollment of Top-		
Ranked 20 PHEIs	6,428	4,028
Total Top-Ranked 20 PHEIs	128,551	80,565
	CLIC C . 1 D	1 2000

Table 22. Total Number of Students and Total FTE of the 20 Top-ranked PHEIs in 2009

Source: Author's calculations GUS Special Report 2009

Overall, the mean enrollment (6,428) of the top 20 PHEIs is higher by 4,500 students than the average enrollment in private sector (1,918), a striking difference⁴⁵ (See Table 23). Our survey of nine institutions is not misleading as far as the generally much larger size of top-ranked than average PHEIs. The average enrollments in the surveyed top-ranked PHEIs (Mean-5,658) and the top twenty PHEIs (Mean-6,427) are roughly three times the average enrollment in the private sector (Mean-1,918). Evaluation of student FTE shows that the 20 top-ranked PHEIs have 80,565 FTE (See Table 22), which

⁴⁵ If we subtract from the total private enrollment (633,097- 330 HEIs), the total enrollment of the top twenty PHEIs (128,551), then the average private enrollment lowers to 1,627 and the difference in enrollment size further increases between the top-ranked PHEIs and average PHEIs.

equals 21.6% of total student FTE in the private sector (371,683) compared to 6% for students overall.

When we have dramatic intrasectoral differences we want to see how the surveyed PHEIs stack up against the public average. In the case of institutional size, we find that even the surveyed PHEIs are much smaller than the average public HEIs. They are in fact not much more than half the size. The intrasectoral size differences are very large but they are much smaller than the intersectoral differences identified already in chapter 4. The top-ranked PHEIs tower over their private counterparts but are no match for their public counterparts⁴⁶.

 Table 23. Average Enrollment within HEIs by Type

Average Enrollment per
Institution
1,918
5,658
6,428
9,671

Source: Author's calculations GUS 2009 & Survey Data 2009/2010

5.2.1.3 Conclusion

The conclusion to draw from the totality of our indicators about size is that the (revised) hypothesis about institutional enrollment size is strongly supported. The findings

illustrate important differences in enrollment between the top-ranked PHEIs and average

⁴⁶ The dissertation does not presume to determine the size of the semi-elite subsector in Poland. That is because the study is conducted to verify whether a semi-elite subsector exists in Poland and, if so, in what ways, with the possibility that some hypothesized semi-elite characteristics exist and others do not. The study does not study top-ranked institutions in individual depth to determine which are semi-elite and which are not. Even if it did so for its nine sampled institutions it would not produce a determination about the non-sampled top-ranked PHEIs. Moreover, Levy provides no grounds for us to hypothesize about semi-elite sub-sectoral size, as he clearly does about institutional enrollment size. His only firm general view about sub-sectoral size is that the demand-absorbing subsector is usually the largest one, which is certainly true of our Polish case. We also have noted that the religious subsector is small in Poland, as in most of Eastern and Central Europe, but neither Levy's general analyses nor our case study gives a basis for hypothesizing about the size of the semi-elite subsector. If one arbitrarily takes 20 Polish top-ranked PHEIs, as possibly the semi-elite subsector, 20% is the share of private enrollment that they hold.

PHEIs in Poland. The top-ranked PHEIs have much higher enrollment and FTE than the average PHEIs. Although there is variation in terms of numbers of enrolled students among the top-ranked PHEIs, on average their enrollment size is about three times that of average PHEIs. Thus not only are top-ranked PHEIs larger than average PHEIs but the magnitude of difference is notable. These results, consistent with Thai and Turkish findings, show semi-elites capturing a much larger share of enrollment than of institutions. Our findings on Enrollment size are thus much more supportive of Levy's revised than his originally presented ideas on semi-elite institutional size.

Despite being larger than average PHEIs, Poland's top-ranked PHEIs are more similar in size to the private than the public sector average. Even so, a majority of the top-ranked PHEIs' have enrollment size closer to the public sector mean than to the private sector mean.

5.2.2 Primary Function

I hypothesized that top-ranked privates mainly focus on teaching and training and have limited research activities. However, I also hypothesized that the top-ranked PHEIs, compared to average PHEIs, place a lot of effort on quality of teaching⁴⁷ and additionally are more involved in research.

The first part of this hypothesis is consistent with global analyses which show that teaching is a primary function of PHEIs and research and expensive facilities are rare in privates outside the US (Levy 1992; Levy 2007; Levy 2008a; Levy 2008b; Levy 2008c). Similarly, as discussed in chapter 4, European regional analysis indicates that most

⁴⁷ "Quality" of teaching and "serious" teaching are synonyms in this research. I recognize that the terms could be distinguished if seriousness refers to effort made, with quality reserved for what is actually delivered; one can make extensive serious efforts and still be low quality.

PHEIs maintain their focus on teaching, while public HEIs lay claim to the bulk of academic research (Kwiek 2009a; Kwiek 2009b; Fried, Glass, and Baumgartl 2007).

On the other hand, the second part of the hypothesis reflects the much more limited intrasectoral literature on PHEIs (Levy 2009a; Levy 2010a), which indicates that there are differences in primary functions among PHEIs. On one end there are elite PHEIs (very rarely found globally but present in US) which are not only serious about teaching but also conduct research. On the other end, we have demand-absorbing PHEIs which range from "garage" institutions to "serious demanding-absorbing" with true teaching and training for certain labor market fields but without research. Somewhere in between there are semi-elite institutions which place priority on good practical teaching or training but applied research may be also a part of their mission (Levy 2009b; Levy 2010a). Some semi-elites, in contrast to demand-absorbing PHEIs, conduct applied research and basic research.

5.2.2.1 Indicators

I evaluate the primary function of the top-ranked Polish PHEIs based on analysis of three financial indicators related to teaching/research activities and evaluation of the levels of programs (bachelor, master and Ph.D.) offered by the top-ranked PHEIs. The quantitative findings are further supported by qualitative findings based on the expert testimony in interviews about the primary function of the top-ranked PHEIs. Thus, I have developed five indicators through which to assess primary function. The data for analysis of the indicators come from my survey, the GUS national database, the Polish governmental website on Ph.D. programs, and interviews.

All three financial indicators are used in both the previous and the present chapters' exploration of hypotheses on Primary function.

As in the previous chapter, the indicators analyzed for Primary functions are powerful but have limitations. Although the allocation of funds for teaching/research activities or right to confer Ph.D. degrees are good indicators of dedication to research and serious teaching, other indicators, leading ones in the general HE literature, like number of publications or extent of research facilities, would ideally be used to measure an institution's seriousness and involvement in research.

Due to a lack of data on programs offered by individual institutions, as opposed to by the whole sector, the enrollment in core science academic discipline could not be included in chapter 5 as it was in chapter 4 for evaluation of primary function of the topranked PHEIs. In sum, most of the indicators I have developed to assess primary function prove to be usable for both inter- and intrasectoral analysis, but some tailoring was appropriate.

5.2.2.2 Operating Activity Income

The analysis of operating activity incomes (including all sources of income such as governmental funds and charges from tuitions) generated by the top-ranked PHEIs is presented in table 24. For these PHEIs teaching on average provides 85.4% of total income, research activities provides 3.1%, and other activities provide 5.3%. These findings support the hypothesis that top-ranked PHEIs focus on teaching— overwhelmingly so-- and have limited research activities.

We have responses on operating activity income from only six of our nine surveyed institutions but there appear to be no outliers. Analysis is complicated by the

fact that two institutions reported income figures not totaling near 100%. For the four institutions that show complete income, teaching always accounts for above 90% whereas research never reaches 3%.

Private HEIs	From	From	From	From Sale of	From
	Teaching	Research	Economic	Materials and	Other
	Activity	Activity	Activity	Goods	Activity
Institution #B	97.3%	2.2%	0%	0%	0.5%
Institution #F	96.0%	0.5%	0%	0.3%	5.2%
Institution #H*	68.0%	0.0%	0%	0%	7.0%
Institution #P	92.0%	0.0%	0.5%	0%	7.5%
Institution #R*	67.9%	15.1%	4.8%	0%	3.1%
Institution #S	90.9%	0.5%	0%	0.2%	8.4%
Average	85.4%	3.1%	0.9%	0.08%	5.28%

Table 24. Operating Activity Incomes in Six Top-ranked Surveyed PHEIs in 2009/10

Source: Author's calculations Survey Data 2009/2010

* Data provided by Institution #H and #R do not add up to 100%

Therefore, analysis of distributions of income sources in the top-ranked and average PHEIs does not support the intrasectoral hypothesis related to research activities. Overall, both groups have similar income distributions with over 90% of their resources coming from teaching activities. Moreover, not research activity but "other activity" is the second major income source. For our surveyed top-ranked privates reporting 100% of income, the teaching share is 85%, followed by 5% from other activity, and only 3% from research activity. For average PHEIs 93% of total income comes from teaching, 5% from other activities, and 2% from research. As top-ranked PHEIs do not differ much from average PHEIs, of course they do not approximate the public sector average. The percentages for the surveyed top-ranked PHEIs, average PHEIs, and public HEIs are summarized in table 25.

HE Institutions	From Teaching	From Research	From Other	Total
	Activity	Activity	Activity	
Surveyed PHEIS*	85.4%	3.1%	5.4%	93.3%
Surveyed PHEIs				
100% of Income	94.0%	0.80%	5.4%	100.0%
Private Sector	93.1%	1.7%	4.9%	100.0%
Public Sector	80.3%	14.7%	4.3%	100.0%

Table 25. Operating Activity Incomes in the Top-ranked Surveyed PHEIs, Private and Public Sectors in 2009/10

Source: Author's calculations Survey Data 2009/2010 & GUS 2009 * Data provided do not add up to 100%

5.2.2.3 Expenditures

The distribution of costs in PHEIs is the second financial indicator used to evaluate differences within the private sector. As table 26 shows, on average, for the six fully reporting surveyed PHEIs the cost of teaching is 88% of total cost, whereas research activities account for less than 6% (and business/economic activities for only 0.5% of total cost). However, evaluation of individual institutions illustrates that there are huge differences among the surveyed top-ranked institutions in terms of cost distributions. The greatest difference lies between institution #P, for which the cost of teaching is 100% of total cost, and institution #R, for which the cost of teaching is 45% of the total cost. But institution #R is very exceptional in the sample. Overall, the findings show that topranked PHEIs have cost of teaching as easily the largest percentage of their total costs. In fact, if we limit our analysis to the four institutions that reported on 100% or nearly 100% of costs, teaching averages 98.3% of total cost.

Private HEIs	Of Teaching Activity	Of Research Activity	Of Business/ Economic Activity	Total
	2	2	2	
Institution #B	96.3%	2.3%	0%	98.6%
Institution #F	86.5%	9.8%	0%	96.3%
Institution #H	99.0%	1.0%	0%	100.0%
Institution #P	100.0%	0%	0%	100.0%
Institution #R	45.3%	19.1%	3.9%	(*) 68.3%
Institution #S	98.2%	1.2%	0%	99.4%
Average	87.5%	5.6%	0.6%	

Table 26. Expenditures of Six Top-ranked Surveyed PHEIs in 2009/10

Source: Author's calculations Survey Data 2009/2010

* Data provided by Institution #B do not add up to 100%

As with our operating activity income indicator, the survey findings only to a modest degree demonstrate differences within the private sector. But the adjective depends on what one chooses to emphasize. The surveyed institutions have an average cost for research activity of only 6% (and that is including the problematic case of institution 18) but that is double that of the average PHEIs, which have an average cost for research activity that is less than 3% (See Table 27). Contrast is more decisive between the six surveyed PHEIs and the average public HEIs. The average surveyed PHEI spends less than 6% on research activity in contrast to the public HEIs' average of 15% on research activity⁴⁸.

Table 27. Expenditures of Six Top-ranked Surveyed PHEIs, Private and Public Sectors in2009/10

Polish HE Sectors	Of Teaching Activity	Of Research Activity	Of Business/ Economic Activity	Total %
Private	96.3%	2.8%	0.8%	100%
Public	84.0%	15.1%	0.7%	100%
Surveyed PHEIs	87.5%	5.6%	0.6%	93.7%

Source: Author's calculations GUS 2009 & Survey Data 2009/2010

⁴⁸None of the three institutional clusters spends even 1% on business/economic activity. This may be a sign of limited intrasectoral difference but more strikingly of limited intersectoral difference.

The majority of the interviewed scholars paint a somewhat rosier picture on the research expenditure side, emphasizing that top-ranked private colleges seek to improve their academic standing through investing in promoting research activities. Institution #B encourages their faculty members to be involved in research and deal with publications as a part of employment contracts, financially rewarding faculty who are publishing, and ending employment contracts with faculty members who do not publish. Moreover, according to interviewed scholars, the top-ranked institutions financially support their faculties' conference and research trips as well as encourage them to develop their own research projects. A few interviewees who are faculty members in the top-ranked institutions emphasize that they frequently receive funding for conferences even if they are expensive trips. Moreover, those interviewees who teach also in public institutions mention that sometimes it is harder to receive funding for research trips from their public institutions than from their top-ranked private institutions. In such instances, top-ranked private institutions would be not just approaching public university practice but exceeding it.

5.2.2.4 Sources of funds - research activities

Although the nine surveyed top-ranked PHEIs indicate that their percentage of income from research activities is very low, it seems that these institutions receive funding for research activities from diverse sources. Eight out of nine PHEIs receive funds for research activities from the government. In addition, five out of six (three out of nine PHEIs did not answer the question related to the sources of funds for research activities) reported receiving funds for research activities from international organizations and from

other sources. A table with data and further analysis of research funds is discussed under the Funding Sources hypothesis in this chapter.

5.2.2.5 Graduate Programs

Polish top-ranked PHEIs predominantly offer bachelor *and* master programs. Offering these programs, which in general lack or have minimal research component, demonstrates that these institutions are serious about teaching but does not demonstrate that they are involved in research. Evaluation of the nine surveyed PHEIs shows that all surveyed institutions offer bachelor and master programs. This is in contrast to most demand-absorbing private institutions, which offer only bachelor programs. That is a powerful difference, consistent with the pertinent semi-elite hypothesis.

Beyond that, as a major trait of prestige in the Polish context is the right to confer Ph.D. degrees, that right would further distinguish these institutions from typical private institutions. Ph.D. is considered to be a research degree in Poland. Polish HEIs which offer Ph.D. programs show their involvement in research and increase their academic legitimacy.

As table 28 shows, the right to confer Ph.D. degrees is given to the five surveyed institutions. That means that 55% of the surveyed institutions may get recognition of academic legitimacy and stature from this Ph.D. right. As mentioned above, an institution has to fulfill strict requirements to receive the right to confer the Ph.D. HEIs that have the right show their research orientation and seriousness of quality of education which is frequently measured by involvement in research—and which is widely denied in the public's and particularly academia's view of PHE. This might be further strong support for the semi-elite hypothesis.

But further analysis indicates that only two out of these five institutions actually offered Ph.D. programs in academic year 2009/2010⁴⁹. This finding raises the question of why some of the top-ranked PHEIs which have a right to confer Ph.D. degrees do not in fact offer any Ph.D. programs. Unfortunately, without further research it is difficult to find a clear answer for this question. I can only speculate that evaluation of financial reasons could figure into consideration given that it is very costly to offer Ph.D. programs. Perhaps some institutions are in the process of preparing their Ph.D. programs.

Table 28. Programs Offered by the Nine Surveyed PHEIs in 2009/10 and the Right to Offer Ph.D. (2011)

Private HE	Private HE Academic Levels of Programs Your Institution				
Institutions	Offered in the 2009	Offered in the 2009/2010 Academic Year			
	Bachelor	Master	Ph.D.	Have a right to offer Ph.D.	
Institution #A	Yes	Yes	Yes	Yes	
Institution #B	Yes	Yes	Yes	Yes	
Institution #F	Yes	Yes	No	Yes	
Institution #H	Yes	Yes	No	No	
Institution #I	Yes	Yes	No	Yes	
Institution #P	Yes	Yes	No	Yes	
Institution #R	Yes	Yes	No	No	
Institution #S	Yes	Yes	No	No	
Institution #T	Yes	Yes	No	No	

Source: Author's calculations Survey Data 2009/2010 & Governmental Data 2011⁵⁰

In any event, the percentages of institutions that have a right to confer the Ph.D. degree compares very favorably for the surveyed PHEIs in contrast to the private sector overall. Only 16 (4.8%) out of 330 PHEIs have the right to confer the Ph.D. degree (as of June 20th, 2011). In contrast, 55% of the surveyed institutions have a right to confer the Ph.D. degree. If we exclude the nine surveyed institutions from the private sector the

⁴⁹ Some top-ranked PHEIs, despite having the right to award a Ph.D., decide not to enroll or graduate any students from the program, most frequently due to financial reasons.

⁵⁰ Data taken from the Polish governmental website – The Central Commission for Academic Degrees and Titles (Centralna Komisja do Spraw Stopni i Tytulow) http://www.ck.gov.pl/images/PDF/Wykaz/wykaz_jednostek.pdf

contrast is even more dramatic: only 11 out of 321 PHEIs have a right to confer the Ph.D. degree, which is only 3.4% in contrast to 55% for the surveyed PHEIs.

The results from our sampled institutions do not differ greatly from the picture for the 20 top-ranked institutions inclusively. As table 29 illustrates, eleven of the 20—the same 55% share-- have the right to offer Ph.D.s. Note that all but one of the top 11 has the right and none of the lowest five do. We can thus make the same comparison with average PHEIs that we made in reference to our sample: when it comes to the top-ranked 20 overall, it is a mere 5% versus a robust 55% that can have the right to offer Ph.D.s. The intrasectoral contrast is sharp. These findings on Ph.D.'s clearly support the hypothesis that the top-ranked PHEIs are more research oriented than average PHEIs. Indeed the difference is very large.

Top-ranked	
Private HE	Have a Right to
Institutions	Offer Ph.D.
Institution #A	Yes
Institution #B	Yes
Institution #C	Yes
Institution #D	Yes
Institution #F	Yes
Institution #G	Yes
Institution #H	No
Institution #I	Yes
Institution #J	Yes
Institution #K	Yes
Institution #L	No
Institution #M	No
Institution #N	Yes
Institution #O	No
Institution #P	Yes
Institution #Q	No
Institution #R	No
Institution #S	No
Institution #T	No
Institution #U	No
0 0	4 1 D 4 2011

Table 29. Right to Confer Ph.D. Degrees by the 20 Top-ranked PHEIs in 2011

Source: Governmental Data 2011⁵¹

⁵¹ Data taken from the Polish governmental website – The Central Commission for Academic Degrees and Titles (Centralna Komisja do Spraw Stopni i Tytulow) http://www.ck.gov.pl/images/PDF/Wykaz/wykaz jednostek.pdf

5.2.2.6 Importance of Research to Top-Ranked PHEIs

The interviews take us beyond the particulars assessed above with data into additional terrain. Now I evaluate the research involvement of the top-ranked PHEIs via discussions with interviewed scholars and rectors. (Above I related interviewee views on research expenditures.) According to interviewed rectors, it is very important for their institutions to offer Ph.D. programs because it signals the academic seriousness of their institutions. This statement fits very much the semi-elite idea of sometimes reaching high for academic orientation, status, and legitimacy—or at least recognizing that they want themselves assessed by that standard. In Poland, HEIs have to fulfill the strict requirements of the Ministry of Education and show the involvement in research activities in order to get a right to offer Ph.D. programs. A majority of interviewed scholars emphasizes that a few top-ranked institutions offer doctoral programs, indicating their readiness to support research and teaching activities that meet the ministerial standards. As stressed by interviewee #C, a rector of the top-ranked private institution, his institution strongly supports research activities:

Research is the top priority of our institution. That is why one sixth of our budget is allocated to support research⁵². In addition, we apply and receive competitive governmental and international research grants. Our faculty members are required to publish and those who publish in prestigious journals are financially rewarded. Moreover, the university maintains the right to award the doctoral degrees in a few

⁵² Public HEIs receive funding from government and on average they spend 15% on research actives whereas average privates spend 3% so 1/6-16% is comparable to average public and while far above average privates. However, according to a very well-known Polish scholar (#I) explanation is needed on how this PHEI defines research because funding publications and conferences or just paying faculty to do research is not really considered conducting research that benefits students. Moreover, the scholar emphasizes that none of the prestigious public HEI uses its own money on research

academic disciplines and the right to award the habilitation degree in one academic discipline.

Although the present number of PHEIs offering the Ph.D. is limited, and the number of areas in which they offer the degree is likewise limited, it is instructive to learn that these institutions have aspirations to expand their number of covered areas. The rectors say that they plan to expand the number of Ph.D. programs to other specializations and rector #A points out that his institution is trying to add another habilitation opportunity via internal academic seminars.

Rectors of course are likely promoters. Interestingly, however, their testimony is supported by interviewed scholars who claim that the top-ranked private colleges utilize various means to promote developing research. Some interviewees indicate that topranked private colleges try to provide funds for supporting research through dedicating some part of their own money to research activities and through applying for competitive governmental and international research grants.

5.2.2.7 Interview Findings-Teaching & Training.

The high quality of teaching as well as research in top-ranked PHEIs is discussed via quantitative data but these data do not sufficiently address the seriousness of teaching in top-ranked PHEIs. The interviews take us beyond the particulars assessed above with data into additional terrain that helps to illustrate the seriousness of teaching in top-ranked PHEIs.

Several of the interviewees say that the most important mission of the top-ranked PHEIs is to provide quality training and teaching for their students rather than to develop extensive research. In order to fulfill their primary mission, top-ranked institutions tend to

hire practitioners—but not just any practitioners. For example, they hire judges in the case of law programs, or former finance ministers and directors of banks in the case of management programs. These practitioners have good academic credentials but also bring practical knowledge and experiences into their teaching.

According to one of the higher education accreditation specialists, some top privates go even further with the training/teaching orientation by establishing learning outcomes measures and by indicating which courses for what degree help to meet these outcomes. This is one of the reasons that some programs offered by top-ranked private institutions receive the highest accreditation rank. Overall, 2% of programs offered by public institutions and 1% of programs offered in private institutions received the highest accreditation scores between years 2001-2008. It is very likely that the PHE 1% comes largely from the top-ranked institutions. The privates whose programs receive the highest scores offer programs of quality above the majority of programs offered by private and public institutions. Here then is another example where top-ranked PHEIs go beyond being in between the sectoral averages, or even matching the public average, to exceed the public average. The accreditation specialist emphasizes also that, as there is no difference in accreditation requirements for public and private programs, programs with the highest scores offered by top-ranked private institutions are comparable with those offered by top-ranked public institutions. This testimony is supported by information presented on the State Accreditation Committee website: "The primary objective of the Accreditation Committee is to support Polish public and non-public higher education institutions in the development of educational standards matching the best models

adopted in the European and global academic space." ⁵³ The committee focuses on "teaching and learning" quality of programs, not on evaluation of research achievements; consequently, the top-ranked privates that develop and monitor teaching outcomes receive the highest evaluation by the committee.

Even further, the accreditation specialist notes that many programs from good public institutions do not receive the highest accreditation scores because they focus only on research and they do not have documents indicating that they pay any attention to teaching quality and student outcomes. In addition, many public institutions are very reluctant to allow external evaluation of their programs⁵⁴. In contrast, at least some topranked PHEIs allow external evaluation of their programs. For example, Kozminski University has three major international quality accreditations - AMBA, EQUIS and AACSB (The Association to Advance Collegiate Schools of Business). However, the expert says that Kozminski University is an exception among private institutions, which in the majority have problems meeting accreditation requirements due to an insufficient number of qualified faculty members and a lack of infrastructure like proper libraries.

The special atmosphere in the top-ranked institutions is another factor that supports the hypothesis that top-ranked institutions are focused on good quality of teaching and training. A few interviewees indicate that top-private institutions purposely create student-friendly atmospheres in which students' opinions are respected and they can openly indicate what skills they would like to gain. Surveys are one of the methods of collecting students' views about faculty members and students' comments on such

⁵³ Citation from the State Accreditation Committee website: http://www.pka.edu.pl/www_en/index.php?page=misja_en

⁵⁴ One might speculate that public universities, whose academic status is generally assumed, do not want to be "put to the test," whereas top-ranked PHEIs are legitimacy-seeking.

matters. Although I lack survey indication on public university counterparts, the tenor of the interviews suggests that such attention to students is not the norm in either sector.

5.2.2.8 Conclusion

Overall, the conclusion we can draw from the totality of data on the totality of our indicators is that the hypothesis about Primary function is rather strongly supported. Indeed, this is the case for both parts of the hypothesis: while top-ranked privates concentrate on teaching much more than research, they do more research than average PHEIs do and engage more seriously in teaching at a higher level than average PHEIs do. In some respects, top-ranked PHEIs not only exceed the PHE norm but approach, match, or even exceed in some aspects the public sector norm at least when it comes to teaching seriousness.

The first part of the hypothesis is supported via evaluation of financial indicators, which show that top-ranked PHEIs are mostly like average ones. At least this is the case in terms of lack of research. Thus the top-ranked PHEIs do not differ from the private sector in terms of their sources of income: they do not come from research activities. Additionally, their spending patterns are also similar to the private sector, focusing on teaching activities without much investment in research activities.

The second (and major) part of the hypothesis is supported by analysis of offered level of degrees. The findings indicate that the top-ranked PHEIs put efforts not only into serious teaching and training by offering Master programs but also by being involved in some research activities through offering Ph.D. and habilitation opportunities. Certainly, both research and Ph.D. are heavily associated with academic legitimacy. Reisz (2003) holds that the single factor by far that defines academics' sense of themselves and the

university is research. This statement is supported by Levy (1992; 2007; 2008a) in term of global HE and by Kwiek (2009) in terms of regional and Polish HE. Offering Ph.D. programs and research are related concepts, though not synonymous. Nevertheless topranked PHEIs which make efforts to fulfill all requirements for offering Ph.D. programs show their seriousness about research. In these aspects they certainly exceed average PHEIs, the large majority of which offer only Bachelor programs and are not involved in research. The original draft of Levy's working paper defining semi-elite postulated that semi-elites are not involved in offering doctoral level programs; however, based partly on the new previous work on Polish PHE (Musial-Demurat 2008). The author (2009) reconsidered the possibility of semi-elite institutions having Ph.D. programs. Thus my present results support the revised expectations about semi-elite institutions.

Data results on sources of funds for research activities also support the second part of the hypothesis, that the top-ranked PHEIs are more involved in research than are average PHEIs. Not only do top-ranked offer Ph.D. programs but also they are actively searching for research funds from the government or from international organizations. This is a sign of interest in developing research. The overall amounts of research funds are marginal but still exceed efforts of average Polish PHEIs, which are not involved in research at all. These findings go along with Levy's (2009) revised view that some semielite institutions may do basic research. Some supportive evidence has come from the Mexican case,⁵⁵ (Silas 2008) and now the Polish case shows that top-ranked PHEIs are sometimes involved in basic research.

⁵⁵ Silas presents data that research at Nuevo Leon's semi-elite institutions is related to teaching and student functions.

But compared to the results on research, results on teaching more strongly support the second part of the hypothesis about Primary function being distinctive in the topranked institutions. Simultaneously top-ranked may even beat in teaching average publics in teaching as they show a lot of effort on quality of teaching. Those top-ranked PHEIs that offer Ph.D. programs are certainly above average PHEIs, which very rarely offer any Ph.D. programs. In this regard the top-ranked PHEIs behave like many public HEIs (96 public HEIs out of 131 offer Ph.D. programs)⁵⁶. The quantitative data on the second part of the hypothesis are further supported by qualitative information gathered during the interviews. In sum, in terms of teaching and training, the top-ranked PHEIs seem to use special techniques and practices that not only other privates but even perhaps most good public places do not do.

All in all, my findings support the semi-elite hypothesis on Primary Function, more strongly in teaching than research and this is consistent with findings from Mexico and Thailand (Silas 2008; Praphamontripong 2010).

5.2.3 Concentration of Institutional Offerings

I hypothesized that top-ranked Polish private institutions are less concentrated in program offerings than are average PHEIs.

This hypothesis is developed based on Levy's (1986; 2002; 2008a; 2009) extensive work on PHE globally. His early findings from Latin America (Levy 1986) illustrate vividly the degree to which private universities often concentrate their enrollments in just one or a few fields. His ensuing works have continued to argue that

⁵⁶ One difference between top-ranked private and average public institutions may possibly lie in the number of offered Ph.D. programs per institution. Public HEI offer more Ph.D. programs than do the top-ranked PHEIs.

typical PHE institutions are much narrower than public counterparts in regard to the range of fields and subfields offered. Though subfields are cited here and there in other studies, Levy's early study (1986) remains the only systematic analysis of all subfields prior to this research. Originally, he speculated that semi-elite institutions might be largely niche institutions, concentrated in a particular field or narrow cluster of fields. However, Praphamontripong's (2010) and Silas' (2008) data show a wide range of fields offered by semi-elites, and not just from institutions' delayed broadening. Mexican semielite institutions have comprehensive offerings which include an ample array of undergraduate and graduate programs in areas such as law, administrative sciences, engineering, education, humanities and health (Silas, 2008). Levy's publication on characteristics of semi-elite PHEIs (2009b) and the two case studies of semi-elites in Mexico and Thailand are building blocks shaping my hypothesis on Concentration of institutional offerings. Though chapter 4 has strongly confirmed for Poland that niche institutions are more common within the private than the public sector, my intrainstitutional hypothesis here suggests somewhat greater breadth for top-ranked than for typical privates.

5.2.3.1 Indicators

I test the hypothesis about the difference in the degree of concentration by top-ranked private and the private sector overall for fields, subfields, and academic disciplines. Ideally, we would like to see these concentrations at the level of individual institutions. However, the regular GUS database does not provide information about fields, subfields, and academic disciplines at the institutional level so there is no possibility to conduct

analyses for individual average PHEIs⁵⁷. Thus overall our indicators are limited in utility by the fact that we cannot get data by each institution.

But we can devise an alternative strategy by comparing findings from our surveyed institutions to the private higher education average. If we find major differences in concentration of institutional offerings between even the *group* of surveyed PHEIs and the private sector, then there is good reason to expect that it is still greater at the institutional level.

If the small group of institutions is anywhere close to the whole sector (with its 330 institutions) that suggests considerable breadth in the top-ranked PHEIs. But overall, comparing nine PHEIs to the whole private sector is not a precise measure taking into consideration differences in numbers of institutions and enrollment in both groups. That is why a decision was made to go one step further in analysis. I randomly select from the private sector (excluding the nine surveyed PHEIs) nine institutions for comparison purposes. Besides comparing nine surveyed PHEIs to the whole private sector we also compare them to the nine randomly selected PHEIs for those indicators for which data are available for both groups. By comparing the same number of institutions we have an additional valid though still imperfect measurement, whether a better one or not. The comparison between the top-ranked PHEIs and the randomly selected PHEIs is possible on field and subfield levels⁵⁸. The comparison is not possible on the academic discipline

⁵⁷ The special GUS report does show information on fields, subfields, and academic disciplines by institutions but the task of analyzing that data institution by institution and then aggregating in statistics that capture the average picture for institutions would require an enormous amount of time.

⁵⁸ Analyses of departments and academic disciplines are mostly not feasible for the randomly selected PHEIs. Data for the nine top-ranked PHEIs for the departments and academic disciplines were gathered via my own survey. Corresponding data for the private sector cannot be retrieved from the GUS; the GUS database does not provide information on departments at all and while it does provide some information on 'academic disciplines,' a comparison with survey data indicates that there are significant differences in reporting academic disciplines between the two sources, i.e., the survey and the GUS. This

and departmental levels since the GUS Database does not provide equivalent data for the randomly selected PHEIs as we gathered for the top-ranked PHEIs through surveying.

The surveyed PHEIs and the private sector are compared in terms of concentration of institutional offerings on three levels: fields, subfields, and academic disciplines s. These three were also used in chapter 4. Additionally, I present data on the number of departments at the surveyed PHEIs. The sectoral data are taken from GUS database whereas data for the surveyed institutions are taken from the special GUS database (field and subfield data) and from the survey (for data on departments and academic disciplines).

5.2.3.2 Fields of Study

The eight fields of study are those listed as such in the GUS database, which itself uses the UNESCO classification⁵⁹. The nine surveyed top-ranked PHEIs comprise 3% of the 330 PHEIs and have 8% of the sector's total enrollment.

The GUS data on the eight fields of study in HEIs show that the top-ranked and the private sector offer programs in almost the same number of fields. The top-ranked PHEIs offer programs in seven out of eight fields of study. This appears to be a very

discrepancy may be caused by the fact that there is no strict definition of 'academic discipline' in Polish HE so different entities may differently report them. There is a possibility of using data on academic disciplines from only the GUS for both the top-ranked PHEIs and average PHEIs but then a new indicator 'GUS academic disciplines' would have to be introduced.

⁵⁹ GUS shows eight major field categories: Education includes only one subfield: teacher training and education science. Humanities and Art includes two subfields: humanities and arts. Social science, Economics, and Law includes four subfields: social science, economics, law, and journalism and information. Science includes four subfields: mathematics and statistics, physical science, life science (biology), and computer science. Health and Welfare includes two subfields: health and social welfare. Technology, Industry, Construction includes three subfields: engineering and engineering trades, manufacturing and processing, and architecture and building. Agriculture includes two subfields: agriculture, forestry and fishery, and veterinary. Service includes four subfields: personal services, transport services, environmental protection, and security services.

http://www.unesco.org/education/information/nfsunesco/doc/isced_1997.htm

impressive finding taking into consideration that the top-ranked PHEIs have only 8% of the total sectoral enrollment.

Evaluation of individual institutions reveals that there is variation in the number of programs offered in fields of study among the nine surveyed PHEIs. As table 30 shows, two out of the nine PHEIs offer programs in four fields of study, three out of nine offer programs in three fields of study, one offers programs in two fields of study, and three offer programs in only one field of study. The results again show that some PHEIs have moderate breadth in terms of offering programs from various fields of study, none offers programs in the majority of fields, and most institutions are specialized, not infrequently to the extreme. Only slightly more than half of surveyed top-ranked institutions (55%) offer programs in more than two fields of study.

But even this reality of only variable and limited breadth among surveyed topranked PHEIs contrasts with the hyper-specialization in the control group. Only two institutions (22%) from the control group offer programs in more than two fields of study. Offering programs from just one or two fields of study is what is typical for the random sample institutions, as we have seen it is for the private sector.

Overall, the results indicate large concentration of institutional offerings in all three 'groups' (the private sector, the top-ranked PHEIs, and the randomly selected PHEIs). The top-ranked nine offer programs in seven fields of study, the comparison group offers programs in six fields of study, obviously not a major difference. This analysis only partially answers the question about differences in concentration between the group of top-ranked PHEIs, the private sector and the selected average PHEIs.

Nine Surveyed	Number of	Nine Average	Number of
PHEIs	Fields	PHEIs	Fields
Institution #S	4	Institution #B	3
Institution #R	4	Institution #G	3
Institution #T	3	Institution #C	2
Institution #B	3	Institution #H	2
Institution #P	3	Institution #D	1
Institution #H	2	Institution #A	1
Institution #I	1	Institution #E	1
Institution #F	1	Institution #F	1
Institution #A	1	Institution #I	1

Table 30. Number of Fields by Nine Surveyed PHEIs

Source: Author's Survey

We can further evaluate the concentration of institutional offerings by moving from number of fields covered to percentage of students in the (eight) fields (See Table 31). Again concentration is striking even in the top-ranked PHEIs. These nine have 73% of students concentrated in just one field of study (Social science, economics, and law). This is a counterpoint to the finding above of strong breadth (in the sense that such a small group of institutions covers almost the entire range of fields); we now see that they do so with a strong concentration in just one field. Another 10% of students are enrolled in the second field of study, with the rest of the students (17%) spread out over five other fields of studies. In comparison, the whole private sector has about 54% of all students enrolled in one field of study, about 17% in the second field, about 9% in the third one, and the rest of students (21%) enrolled in five fields of studies. Thus, both the surveyed group and the whole sector have the majority of students in just one field but the topranked have 73% students in this field whereas the private sector has 54%. In this regard the hypothesis might not appear sustained, as the top-ranked group is even more concentrated. The surveyed group has just one other field at even a tenth of enrollment

and the total private sector has four-fifths of its enrollment in just three fields. Both the surveyed group and the overall sector show high concentration of institutional offerings.

However, closer analysis shows that enrollment in the nine randomly selected PHEIs is below 1% in two out of their six fields of study, leaving significant representation in only four fields of study. In contrast, the surveyed nine PHEIs have comparatively more distributed programs among their seven fields of study with only one field under 1% enrollment. However, it is in (three of the four) very low enrollment share fields where the difference between the two groups of nine shows starkly as the topranked PHEIs manage to get 8% into these fields whereas the randomly selected group does not muster even 1%.

PHE is highly concentrated even as an aggregated sector, as chapter 4 showed; we see in chapter 5 that the concentration is predictably still more marked when we disaggregate to groups of institutions, let alone to individual institutions. The question then has been whether top-ranked PHEIs are notably less concentrated. Table 31 shows the difference in the percentage of students in fields of study in nine surveyed PHEIs and nine randomly selected PHEIs⁶⁰.

⁶⁰ The contrast between the two groups of nine may not be as impressive regarding the top-ranked PHEIs' breadth as it first seems. Enrollment size greatly differs between the two groups and thus may easily influence the number of fields of study covered. The group of nine top-ranked PHEIs has twice the enrollment of the other group. However, it is difficult to judge whether enrollment size influences the number of fields of study or perhaps a decision to offer programs in only few fields of study causes a lower enrollment size.

Field	Nine Surveyed	Nine Randomly	Private
	PHEIs	Selected PHEIs	Sector
Field 1	10%	139	⁄o 17%
Field 2	4%	110	6%
Field 3	73%	700	6 54%
Field 4	5%	60	/o 5%
Field 5	3%	0.20	/o 5%
Field 6	1%	00	/0 3%
Field 7	0%	00	⁄o 1%
Field 8	4%	0.5%	<i>/</i> o 9%
Enrollment	50,923	27,75	1 633,097

Table 31. Percentage of Enrollment by Fields in Nine Surveyed PHEIs, Nine RandomlySelected PHEIs, and the Private Sector

Source: Author's Survey & Special GUS Report

Stepping back to see the large picture, there are two overwhelming facts, both showing that the top-ranked as a group fail to break typical field concentration patterns. One is the super-high concentration in just one field (Social sciences, economics and law). The top-ranked group is even slightly more concentrated there than is the random group. Second, for the most part the two groups cluster in the same fields. This is of course easily most dramatic for the majority field. But even the second field of each is the same (Education) and their third and fourth fields are the same (Humanities - Art and Science), only in reverse order. Only after that do we get large proportional differences between the groups, and then we are dealing with small enrollment and small shares of each group's enrollment.

5.2.3.3 Subfields

But we can go further with our evaluation of concentration and focus on subfields. Not all subfields are analyzed in this research because some fields are very homogenous and have only one or two subfields. The four not analyzed fields include Education, which has only one subfield overall, and Agriculture, for which PHE has only very low enrollment (0.4%) and top-ranked PHEIs have no enrollment. Humanities and arts and Health and welfare both have only two subfields, but it is fair to note that there is no difference between the share of enrollment in the top-ranked PHEIs and the private sector overall.

I present data on subfields' differences between the top-ranked private and the private sector by following the order of subfields presented in chapter 4 starting with the subfields of Social science, economics and law field, followed by the Science field, exactly Technology, industry, construction field, and Services field.

The four subfields inside the Social sciences, economics and law field show that degree of concentration is moderately lower within the top-ranked PHEIs than in the overall privates sector. As figure 9 shows, 65% students enrolled in the private sector are concentrated only in one subfield (business and administration), another 27% study in the second subfield, and less than 4% in the third and fourth subfields. In contrast, only 45% students enrolled in top-ranked PHEIs are concentrated in one subfield (business and administration), another 40% study in the second subfield, and respectively 9% and 6% in the third and fourth subfields (See Figure 10). Overall, both groups are high in concentration. After all, the whole private higher education has 85% in just two subfields. But these results on subfields clearly illustrate that top-ranked PHEIs are less concentrated than the private sector. This is an impressive finding because in this case we compare nine top-ranked PHEIs to 330 PHEIs and the group of nine has a more diverse enrollment distribution within the (crucial in size) field of Social sciences, economics and law field than the group of 330 PHEIs.

Figure 9. - Private PHEIs - Percentages of Enrollment in Social Science, Economics and Law Field

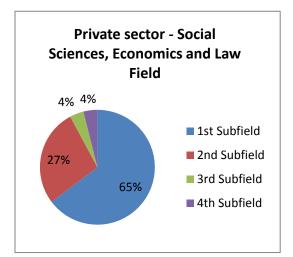
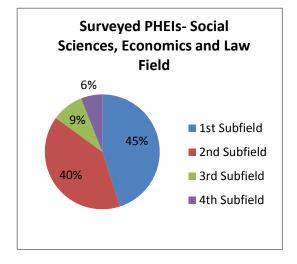


Figure 10. - Surveyed PHEIs - Percentages of Enrollment in Social Science, Economics and Law Field



Figures 9 & 10 - Source: Author's calculations GUS Report 2009

The control group of randomly selected PHEIs shows how hyper- concentrated the distribution of subfields can be in just nine colleges. 74% of students enrolled in these institutions are concentrated in only one subfield (business and administration), another 24% in the second subfield, less than 2.5% in the third, and only 0.4% in the fourth. The finding indicates that the control group of PHEIs is very focused not only on the field level (as was shown above) but also on the subfield level, this for by far the most important field. In contrast, the top-ranked PHEIs have enrollment more equally distributed by fields and subfields of the Social science, economics and law field.

Within the Science field, analysis of the four subfields shows stronger concentration at the surveyed PHEIs than even in the private sector overall. Figure 11 shows that 87% of students from the private sector study in just one (computer science) out of the four subfields, another 11% in a 2nd subfield, and less than 1% in the third and

fourth subfields of the Science field. But all students from the top-ranked PHEIs study in

the same subfield (computer science) of the Science field (See Figure 12).

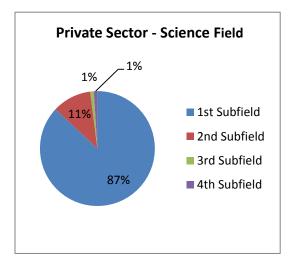


Figure 11. - Private PHEIs - Percentages of Enrollment in Science Field

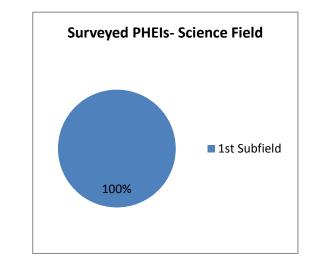


Figure 12. - Surveyed PHEIs - Percentages of Enrollment in Science Field

Figures 11 & 12 - Source: Author's calculations GUS Report 2009

But the concentration measure pitting nine against 330 institutions is problematic, so for the fairer comparison we turn again to our nine randomly selected institutions. In terms of enrollment distribution by the subfields of the Science field, these privates have the same distribution as the top-ranked PHEIs with 100% of students enrolled in the computer science subfield. This still obviously does not support the hypothesis about less narrow concentration in the top-ranked privates.

In the subfields of Technology, industry, and construction field the top-ranked PHEIs are even more concentrated than the private sector overall. They have 78% in just one subfield and 22% in a second (See Figure 14). The comparable figures for the sector are 56% and 34% (See Figure 13).

Figure 13. - Private PHEIs - Percentages of Enrollment in Technology, Industry, and Construction Field

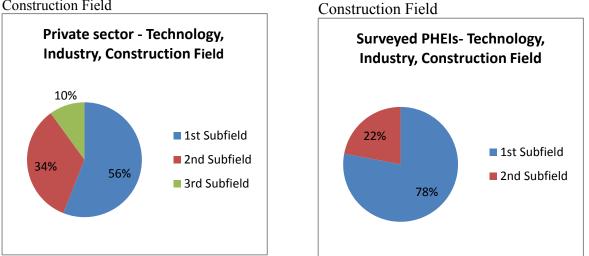


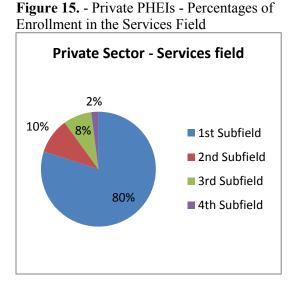
Figure 14. - Surveyed PHEIs - Percentages of

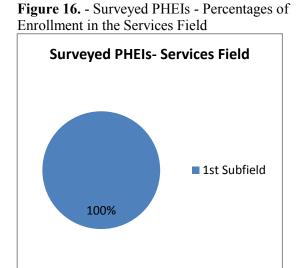
Enrollment in Technology, Industry, and

Figures 13 & 14 - Source: Author's calculations GUS Report 2009

The randomly selected PHEIs offer programs in only one subfield of the Technology, industry construction field. They are again more focused than even the topsurveyed PHEIs. Again the top-ranked PHEIs prove to be somewhat broader in their subfield offerings.

Analysis of the four subfields of the Service field shows the predictable stronger concentration within the surveyed PHEIs than within the private sector. As figure 15 illustrates, 80% of students from the private sector study in just one (personal services) out of the four subfields but 100% from the top-ranked PHEIs do (See Figure 16). Again it is abundantly clear that top-ranked PHEIs are mostly like PHE overall in terms of subfield concentration.





Figures 15 & 16 - Source: Author's calculations GUS Report 2009

Obviously this time concentration cannot be greater in the subfields of the randomly selected privates. 100% cannot be exceeded. The only contrast is that for the randomly selected privates the one subfield is different (the transportation subfield)⁶¹.

5.2.3.4 Academic disciplines

Having evaluated intrasectoral enrollment in all the fields and then some of the subfields, I now focus on the distribution of offered academic disciplines within the surveyed top-ranked PHEIs. This analysis takes us to an even more discriminating indicator than field and subfields of study discussed in the literature (Levy 1986). This

⁶¹ The simplest explanation of this difference may lie in the fact that most students (80%) from private HEIs study in one subfield of the Service field (personal subfield) that is the most market oriented subfield. However, overall the private sector (aggregating so many individual institutions) educates students in all four subfields of the Service field. It happens that one institution from the control group offers programs in a different subfield than the most popular one; the enrollment in this program is responsible for results reported for the control group for the Service subfield. Here we have an example of a situation in which the randomly selected institutions) causes two problems: first, the sample group may not represent the whole private sector and second even a small enrollment in one of the control PHEIs may strongly influence findings. We can speculate that our selected top-ranked group is more representative of top-ranked PHEIs overall than our control group is representative of the private sector. That is because we select nine top-ranked PHEIs from probably a pool of 20 top-ranked PHEIs whereas we randomly select nine PHEIs from the pool of 309 average PHEIs.

new indicator for PHE (or even HE) analysis is one worth paying a lot of attention to when it comes to assessing degree of concentration.

As table 32 shows, on average, the top-ranked PHEIs have four departments and offer programs in eight academic disciplines. An analysis of an individual institution shows large differences among the institutions. On one end Institutions #B and #S have a large number of departments and a large number of academic disciplines. On the other end, Institutions #H, #I and #T have a small number of departments and a small number of academic disciplines. In between are Institutions #F, #P, and #R which have a relatively small number of departments and a larger number of academic disciplines. These findings show a diversification within the surveyed group (which can be partially explained by the sizes of institutions).

Private HE Institutions	Number of	Number of
	Departments	Academic
	_	Disciplines
Institution #A	-	. 6
Institution #B	8	17
Institution #F	2	6
Institution #H	5	4
Institution #I	3	3
Institution #P	3	12
Institution #R	5	11
Institution #S	8	13
Institution #T	3	4
Average #	4.6	8.4
C A (1) 1	1.0 D	4 2000/2010

Table 32. Number of Departments and Academic Disciplines in Nine Surveyed PHEIs

Source: Author's calculations Survey Data 2009/2010

Overall, the findings on the academic disciplines offered by the top-ranked PHEIs support the hypothesis that the top-ranked PHEIs have broader focus than the randomly selected PHEIs. The private sector's 330 institutions offer programs in only 82 GUS academic disciplines but some the individual top-ranked PHEIs offer programs in even

17 academic disciplines⁶². Of course it is not easy to compare the top-ranked PHEIs to the private sector in terms of concentration because I have data on intuitional level for nine institutions but not for all PHEIs.

As our statistical analysis of data has not been conclusive regarding degree of concentration of the top-ranked PHEIs, I incorporated expert testimony to help illuminate matters on the most discriminating units of analysis-- departments and academic disciplines. In fact, that testimony hardly alters or much enlarges our understanding. According to two interviewees (#F & #G) a few top-ranked private institutions do contrast sharply with the large number of demand-absorbing institutions that have only one department that offers one or two academic disciplines. In contrast, some top-ranked privates can have two to three departments and in each they offer two to four academic disciplines. To whatever limited extent, the findings from interviews support the hypothesis that top-ranked PHEIs offer more programs than demand absorbing institutions.

5.2.3.5 Conclusion

The concentration indicators alternately show breadth and narrowness in our surveyed group. But distinctiveness from typical PHEIs becomes more apparent as we proceed to our more discriminating indicators—more on subfields and academic disciplines than on fields.

On fields, the top-ranked score in that even such a small group covers almost all fields but narrowness is manifest in the great concentration in just one field, with only

⁶² These findings can be read to support not only the hypothesis on Concentration of institutional offerings but also an argument about overall quality of top-ranked PHEIs. Having certain departments requires fulfilling strict governmental requirements in terms of number and qualification of faculty members. Thus PHEIs which are able to fulfill governmental requirements and offer programs in various academic disciplines there show their robustness over other HEIs.

limited representation in several. Put another way, the group is similar to the entire private sector in both respects (coverage of fields and a concentrated majority of enrollment in just one field) but for the whole sector to achieve field coverage is much less impressive than for a group of only nine to do so. Thus, whereas chapter 4's findings on the sector necessarily emphasized high concentration, our findings here on the nine top-ranked institutions show mixed results on concentration. Even on the fields indicator, it may be for good reason that the latest formulation of hypotheses about semi-elite institutions has hedged when it comes to concentration of functions. My hypothesis –that the top-ranked would have more breadth than average PHEIs—is confirmed but equivocally.

The difference in enrollment distribution by subfields is especially visible for the easily largest field-- Social science, law and economic. The subfields findings for this field strongly show the differences between the top-ranked PHEIs and the private sector. The subfields findings on the other fields, which have much lower enrollment, do not as strongly support the hypothesis as the findings on the largest field. Similarly analyses of a number of departments and academic disciplines show mixed results in terms of broadness of offers in top-ranked PHEIs.

Taken together, the findings on Concentration show that in terms of number of fields, subfields, departments and academic disciplines the top-ranked PHEIs are not consistent. Some of the institutions offer programs in a few fields of study; others focus on only one field. Some top-ranked PHEIs have a large number of departments and academic disciplines; others are more specialized and have a smaller number of departments and academic disciplines. While 'concentration' has a core meaning (which

each of discussed indicators measures), the devising of the indicators, and analysis of the data used to measure them, shows that 'concentration' is also an encompassing multiple concept.

5.2.4 Field Subject Matter

I hypothesized that top-ranked Polish PHEIs fields' of study are mostly like the fields of the private sector overall but also get more enrollment into fields that are unconventional in the private sector. In effect, this hypothesis has two parts.

The hypothesis is developed based on the Levy (2009) hypothesis on characteristics of semi-elite institutions but it is tested through a new approach that systemically evaluates fields and subfields of study Levy's inclusion of field subject matter is part of his broad look at "what semi-elite institutions do." He posits that semielites concentrate on offering non-expensive programs with special attention to MBA programs, management, accounting, tourism, and computer science (Levy 2008a; Levy 2009b)⁶³. But he also posits that they get more into other fields, including harder and more costly ones, than do typical PHEIs.

5.2.4.1 Indicators

I probe the hypothesis about the differences in the fields of study with enrollment data by fields and subfields of study in the GUS database, my survey data for the top-ranked PHEIs, and expert testimony on top-ranked PHEIs in relation to the private sector. Thus, as when we probe many other hypotheses, we use mostly quantitative data, supplemented by qualitative information.

⁶³ This hypothesis is supported by the case study of Mexican semi-elite institutions that have comprehensive offerings which include an array of undergraduate and graduate programs in areas such as law, administrative sciences, engineering, education, humanities and health (Silas 2008).

Although data on fields and subfields of study are available for individual institutions in the special GUS report, an analysis of all 330 individual PHEIs is infeasible. Thus, as with our preceding Concentration of institutional offerings hypothesis, I compare here findings from our surveyed institutions to PHE overall. If we find major differences in fields and subfields of study even between the surveyed PHEIs and the private *sector*, then there is good reason to expect that it is still greater at the individual institutional level.

The random sampling included in my analysis of Concentration of institutional offerings is not included in this analysis of field subject matter. That is because concentration is much more dependent on sizes of compared groups. The private sector is much larger than the nine top-ranked PHEIs; thus it may be much less concentrated due to its size rather than due to breadth of typical PHEIs. Having a random group of nine PHEIs offsets that problem regarding concentration but would not be pertinent regarding Field Subject Matter⁶⁴.

The analyses are presented for fields and subfields of study but not for departments and academic disciplines. That is because the GUS database does not provide data on departments at all. Also, my survey provides only numbers of academic disciplines and departments per top-ranked institution, not names of academic disciplines or departments so while it was possible to present data on these detailed levels on the Concentration hypothesis it is not possible on the field subject matter hypothesis.

⁶⁴ However, a few outliers--meaning PHEIs with atypical programs-- may bias the data on field subject matter. For example, a single institution with a large enrollment in one subfield may skew overall enrollment for the private sector in that subfield and it make it appear that the subfield is not terribly uncommon in that subfield, when in fact it is. This is not to say that this institution's subfield should be ignored; it is after all part of the sector, but an aberrant part.

As mentioned in chapter 4, to measure Field Subject Matter we have very strong quantitative indicators: enrollments in fields and subfields. They convincingly measure the breadth of the hypothesis--- and in the Polish case come with ample data. These indicators were used previously by Levy (1986) for analyzing private sectors in Latin American countries and in exploring various types of private HEIs (Levy 1986; Levy 2002; Levy 2008c; Levy 2009a) globally. Additionally, the fields of study are frequently used in descriptions of privates sectors in European countries (Wells, Sadlak, and Vlasceanu 2007), though more ad hoc than systematically.

5.2.4.2 Fields of study

In a nutshell, my findings on distribution of enrollment by fields of study in the Polish top-ranked PHEIs partially support the semi-elite hypothesis (Levy 2009b).

On the one hand, even these institutions do not break loose from the overall private-public subject matter contrast highlighted in chapter 4. Even the top-ranked enrollment focuses on the soft social sciences field and Education fields while trailing notably in the Technology, industry, construction, and Agriculture fields. As table 33 shows, 73% of students studying in the top-ranked PHEIs are enrolled in the Social sciences economics and law field. This is not a surprise finding taking into consideration that this field combines soft usually low cost programs that are market oriented and commonly offered by PHEIs globally (Levy 1986; Levy 2002; Levy 2008c; Levy 2009a). Another 10% are enrolled in pedagogy programs so almost 83% of all students enrolled in the top-ranked PHEIs are concentrated in these two soft fields.

Moreover, like the private sector programs, the top-ranked PHEIs are severely underrepresented in the four fields that are generally more expensive Health, Science,

Technologies, and Agriculture fields. These findings pointedly contradict the second part of the semi-elite hypothesis on Field Subject Matter: top-ranked do not engage notably more in these hard/expensive fields. 8.3% in the lower four fields is no "better" (in fact modestly worse) than the sector overall. In Health, the top-ranked trail even the private sector overall, 3.0% to 5.5%, and by 0.3% versus 3% in the Technology, industry, construction field. In the Agriculture field the contrast is 0 versus 0.4% for which the top-ranked enrollment is zero in contrast to 0.4% in the private sector. A little higher enrollment in visible in the Science Field, for which both the top-ranked group and the private sector have enrollments close to $5\%^{65}$.

U	5		5	
Field Study	Surveyed Priv	ate HEIs	Private Secto	or
Social Sciences, Economics & Law	36,906	73.2%	344,252	54.4%
Education- Pedagogy	5,186	10.3%	107,341	17.0%
Services	2,118	4.2%	55,765	8.8%
Humanities and Art	2,018	4.0%	36,315	5.7%
Science	2,523	5.0%	34,858	5.4%
Health and Welfare	1,526	3.0%	34,625	5.5%
Technology, Industry, Construction	157	0.3%	17,598	2.8%
Agriculture	0	0.0%	2,343	0.4%
Total	50,434	100.0%	633,097	100.0%

Table 33. Eight Main Field Studies by the Private Sector and the Surveyed PHEIs

Source: Author's calculations GUS 2009 & Survey Data 2009/2010

Overall, the evidence on fields confirms the first part of the hypothesis while not confirming the decisive second part, the distinctiveness part. The top-ranked PHEIs follow the private sector enrollment pattern, including the only very low share of enrollment in the harder and more expensive fields.

⁶⁵ Some enrollment in the Engineering field is not a surprise because, as found by Levy (1986), private "elite universities" have a stake in producing highly trained graduates in fairly expensive fields as long as graduates' future earnings are perceived to be high. Note that engineering is much more common than medicine in our Polish findings as well as in Levy's Latin American cases. As explained by Levy, one of the reasons for this phenomenon may be the elite subsector's ties to manufacturing interests.

5.2.4.3 Subfields

Subfields of the field of the Social sciences, economics and law are strikingly different between the top-ranked PHEIs and the sector overall. In our judgment this more than outweighs the field level contrast wherein the top-ranked institutions have an even higher presence in this soft field (85% to 54%). The top-ranked institutions have the highest enrollment in social sciences subfield whereas the private sector has the highest enrollment in business and administration subfield. Our finding here is consistent with the semi-elite hypothesis that top-ranked PHEIs are more academically oriented than average PHEIs. The high percent of enrollment in social science subfield from the topranked PHEIs is not consistent with Levy's (1986) analysis of subfields of study in private sector in Latin America⁶⁶. The social science subfields in Poland's top-ranked PHEIs go beyond the sector's business, management, accounting, computer studies, and tourism subfields.

However, the finding is consistent with Levy's (2009b) view that semi-elite institutions may add academically oriented social science subfields to their business majority. Offering program from academically respected fields by top-ranked PHEIs supports their aim to search for academic legitimacy (Levy 2009b). Poland's top-ranked PHEIs have high enrollment in psychology, sociology, economy, and European study academic disciplines.

Further analysis shows that the top-ranked PHEIs have higher enrollment in the law and journal and information subfields in comparison to the private sector (See Table

⁶⁶ On the surface the Latin American private sectors have extraordinary concentrations in the economic, administrative, and social sciences as well as in the educational and human sciences. However, as Levy (1986) indicates this does not imply that PHE has lots of academic social science. It has a lot of the aggregate category field but an analysis of subfields indicates that academic social science is lighter whereas administrative-commercial is weightier in enrollment.

34). So distinct from PHE overall are the top-ranked PHEIs in their distribution of enrollment for subfields of the Social sciences, economics and law field that we can compare to the public sector and, indeed, they are much more similar to the public sector than to the private sector. This finding strongly confirms the second part of the hypothesis.

Table 34. Social Sciences, Economics and Law Subfields by the Private Sector,

 Surveyed Private HEIs

Field Study	Surveyed Private	Surveyed Private HEIs		or
Social Sciences	16,781	45.5%	95,234	27.6%
Business & Administration	14,776	40.0%	226,015	65.7%
Law	3,244	8.8%	12,677	3.7%
Journalism & Information	2,105	5.7%	10,326	3.0%
Total	36,906	100.0%	344,252	100.0%
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Source: Author's calculations GUS 2009 & Survey Data 2009/2010

In sum, by disaggregating beyond fields to subfields we see important differences between top-ranked and average PHEIs. Whereas comparisons at the field level of Social sciences, economics and law did not support the hypothesis of subject matter difference, comparisons at the subfield level do. And they do so strongly. As we now move inside the other fields, we find much less evidence of subfield differentiation.

One field is obviously inconsequential as far as comparing top-ranked to average PHEIs in subfields. The Education field has only one subfield – pedagogy -- so obviously there are no subfield differences in distribution of enrollment among the private sector and the top-ranked PHEIs.

In two other fields all students of the top-ranked PHEIs are in just one subfield and the vast majority of the sector's students are in the same subfield. For the Services field, it is the personal subfield. For the Science field it is computer science, with 87% of the field's enrollment for the entire private sector. The lack of presence in more core science subfields is perhaps not surprising, but it is striking in degree. As stated in chapter 4, the logic of the computer science exception within the Science field is clear for PHE, and apparently it dominates even for the top-ranked PHEIs.

Within the Humanities and art field, the majority of both the top-ranked PHEIs' and the private sector's enrollments are in the humanities subfield. The top-ranked PHEIs have 100% of their enrollment in humanities subfield whereas the private sector has 83% of its enrollment in humanities subfield and 17% in art subfield.

Evaluation of the Health field's two subfields--health and welfare services—does not show internal differences between the top-ranked PHEIs and the private sector. The health subfield is the only one in which we can additionally see academic disciplines. Even at this further level of disaggregation top-ranked PHEIs fail to distinguish themselves from the sector overall. Both groups completely lack the medical sciences⁶⁷. Even the top-ranked PHEIs focus on social work, medical rescue, and public health. Their absence in the medical sciences—where globally some PHEI have staked a claim undermines the semi-elite hypothesis about subject matter distinctiveness within Poland's private sector.

Finally, for the Technology, industry, construction field and the Agriculture field, we noted under the field section that the top-ranked PHEIs have a very low enrollment (0.3%) in the first and zero enrolment in the second. The top-ranked have some (less than

⁶⁷ The comparison of the GUS academic discipline data is possible for the health subfields because there are only a few academic disciplines there and only a few PHEIs that offer academic discipline of the health subfields. For other fields and subfields comparisons at the academic disciplines level would be very challenging because subfields often have many academic disciplines. In sum, analyses of the GUS academic disciplines become very complicated due to the large number of academic disciplines and a large number of PHEIs in Poland.

two hundred students) enrollment in two Technology subfields -- civil engineering and electrical engineering. Even the private sector overall has a bit more diversification of enrollment than the top-ranked group, again undercutting the semi-elite distinctiveness hypothesis.

We have a crucial asymmetry to weigh when it comes to our evidence on subfields. Within only one field do subfields show decisive differentiation. But that field is by far the largest field. And the differentiation is decisive for the single largest subfields of the top-ranked group versus the total sector group, respectively: social science versus business and administration. To say generally that subfields show major distinctiveness between the sampled and the sector overall would obviously be false, but it would be misleading simply to say that in seven out of eight fields subfield differentiation is minor.

5.2.4.4 Summary of Interviews

Already in commenting on PHE generally (Chapter 4) most interviewed scholars noted that although even top-ranked private institutions offer only a relatively limited number of expensive programs and specializations in comparison to comprehensive public universities, they but offer more programs than average PHEIs. One interviewee (#I) summarizes that PHEIs offer only around 50% of all programs offered by public institutions, lacking medicine, core science programs like physics or chemistry, and many technical programs. This statement is consistent with our data. Even though top-ranked privates do offer programs in the Health and welfare and Science fields, they still do not have any programs in medicine or core science like physics or chemistry, which remains a much more common feature of the publics. Interviewees note that these programs tend

to be expensive, requiring specialized laboratories that cannot be funded from even the top-ranked private institutions' budgets, which in the majority tuition driven. According to interviewee #G there is no scientific-technical private university that can compete with scientific-technical public universities. Even where privates have laboratories most of them are small teaching laboratories rather than research laboratories. These findings are consistent with the PHE global literature which shows that in general privates have low enrollment in the science and technology fields (Levy 1986).

Nonetheless, as top-ranked PHEIs claim to offer courses that are more job-related than many courses offered by average PHEIs or public institutions. Due to their flexibility in management, top-privates teach practical skills which are desired by future employers; for example, one of the top-ranked private institutions offers courses like "insurance law", "copyright law" and "tax law." Interviewed professor #B from one PHEI says that his college purposely offers such courses because they have more job appeal oriented than courses offered by public HEIs and because these courses are simply not offered by top public HEIs like the University of Warsaw. In order to compete with top public HEIs top-ranked HEIs have to offer other courses than the most established ones at public places. Accordingly, the top PHEIs cannot offer "civil law" because everyone knows that this academic discipline is the best at the University of Warsaw. According to several interviewees, the top PHEIs' law courses are oriented to give students practical knowledge and experiences in specific law subdivisions. In addition, to promote practicality of courses some faculty members organize special informal meetings for students so they can discuss law cases in informal groups. Examples of these kinds of

initiatives are the meetings called "about law with coffee and tea" organized in one topranked private institution.

5.2.4.5 Conclusion

By our different indicators out findings on Field Subject Matter in the top-ranked PHEIs are mixed. By nearly all gauges, these institutions resemble most average PHEIs in many ways, thus sustaining the first and rather less demanding part of our hypothesis. The institutions are definitely a recognizable part of the PHE family. The super high share of enrollment in the Social sciences, economics and law field followed by the Education-Pedagogy field is the strongest evidence. Similarly like the private sector overall, the top-ranked PHEIs are severely underrepresented in the Science, Technologies, and Agriculture fields.

By this field-level evidence, the second part of the subject matter hypothesis, the intrasectoral distinctiveness part, is not supported. But by the analysis of subfields the distinctiveness hypothesis finds important support within a mixed picture. Although the top-ranked PHEIs offer a relatively limited number of expensive programs and specializations, they offer some decidedly different program content. This is striking in the numerically decisive social sciences subfields. Moreover, there is some indication of distinctiveness in the level of training. Nonetheless, even in the subfield analysis we mostly find non-distinctiveness between the top-ranked PHEIs and the PHE sector.

5.2.5 Student Quality

I hypothesized in chapter 3 that Polish top-ranked PHEIs have the semi-elite characteristic of a relatively high quality student body which differentiates them from average PHEIs.

Overall, Levy (2009, 2010) emphasizes that intrasectoral differences exist in student body composition among PHEIs. Demand-absorbing institutions due to their open admission policy and relatively lower tuitions tend to have less prepared students, often coming from HE's lower social classes than student enrolled in elsewhere in HE, certainly elsewhere in PHE. Semi-elite characteristics include high student status and selectivity (Levy 2009b; Levy 2010a). Thus there is an expectation that social-class of semi-elite students may be quite high, often including accomplished graduates of the secondary system, and also including those capable of paying ample private tuitions (Levy 2009b). In the regional (Latin America and Eastern Asia) and county cases (Japan and Turkey) discussed by Levy (2009b) very leading private universities compete almost equally in the top student market with the country's leading public universities, but only in some fields. Additionally, Levy argues that despite a market limitation there is an expectation that semi-elites have much higher share of full-timer students than do most private institutions. Especially those semi-elites institutions aspiring to academic legitimacy would be devoted to maximizing their share of top students (Levy 2009b), which in turn would help attract students with choice.

5.2.5.1 Indicators

As noted in chapter 4 there it is not an easy way to directly gauge the qualifications of the students that enter programs offered by public and private institutions due to a lack of data on entrance requirements in Poland. That is why my hypothesis about the difference in quality of students in top-ranked PHEIs and average private HEIs is examined by analyzing four admittedly inferior quality indicators. The four indicators include full/part timers contrasts, ministry scholarships received, amount of tuition charged, and expert

testimony. I evaluate the first three indicators based on the survey results and the national database, and I present testimony from interviews about the overall quality of students in the top-ranked PHEIs as compared to students in other institutions. Indicators parallel those use in the previous chapters. It is the fourth indicator, -- amount of tuition charged—that is fresh for chapter 5. Of course, tuition was an indicator in chapter 4, but not for the hypothesis on Student quality; instead, it was a powerful indicator of private-public difference in financial source.

Student quality is a good example of where not all indicators for testing hypotheses are equally strong. Expert testimony is a well-established indicator in higher education literature, often referred to as reputational status.

The percentage of full/part time students is established in the higher education literature. At the other extreme, ministry scholarships received is a shakier indicator since I do not know much about the process and the weight that merit plays in the process. Tuition level is only a very indirect indicator, via social-economic status. PHE may be higher than the public sector in terms of socio-economic background, though I have only ad hoc interview observations on this claim. PHE tuition is usually higher, often much higher, than public HE tuition, but public HE is usually the first choice and those who make the cut are often from the most privileged SES backgrounds. Tuition is not a sure indicator of student quality and many would dispute its validity but it may be a fair indicator of selectivity, which we know is usually correlated in HE with what is considered student quality.

5.2.5.2 Full/Part Time Students

As table 35 shows, the average percentage of full-time students in my nine surveyed topranked PHEIs is 33%. In contrast, the average percentage of full-time students in the whole private sector is 17%. The difference of 16% is large, clearly illustrating that topranked PHEIs are ahead of average PHEIs in terms of enrolling full-timers. This finding illustrates a powerful combination: the *data* show major differences between top-ranked and average PHEIs on probably the most reliable *indicator* of student quality analyzed in this chapter.

However, the survey finding on full-timers at top-ranked PHEIs must be qualified in at least two ways. One is that even for the surveyed institutions only one-third are fulltimers. Second is that there is considerable variation among the top-ranked institutions. The institution #F has the highest number of full-time students, 56%, whereas Institution #T has only 6%. From the group of nine surveyed institutions six (67%) have higher percentage of full-timers (above 17%) than the sectoral average but that means that onethird are even lower than the sectoral average. Overall, the very high ranked institutions have notably higher full-time shares than the lower ones even within the top 20.

There is a very strong correlation between the rank of an institution and its percentage of full-time students. Indeed, four of the top five PHEIs are far above the sectoral average in terms of the percentage of full-timers and all five PHEIs are above. In contrast, three of the bottom four PHEIs surveyed are below the sectoral average (17%), though it is also pertinent to note that two of the three are only slightly below.

Given that the differences between the surveyed top-ranked PHEIs and the private average are notable, how then do the surveyed institutions stack up against the *public*

average? Overall the surveyed top-ranked PHEIs are below the average public HEIs in term of percent of full-time students as on average 65% of public HEI students are full-time students. However, some PHEIs like Institution #F are not that far away, coming within 10% of the public norm.

Private HE	Number of	Percent of	Number of	Percent of	Total
Institutions	Full-time	Full-time	Part-time	Part-time	Number of
	Students	Students	Students	Students	Students
Institution #A	2,670	47%	3,069	53%	5,739
Institution #B	5,998	50%	5,905	50%	11,903
Institution #F	2,207	56%	1,751	44%	3,958
Institution #H	1,021	24%	3,223	76%	4,244
Institution #I	708	44%	887	56%	1,595
Institution #P	1,008	12%	7,649	88%	8,657
Institution #R	2,410	26%	6,926	74%	9,336
Institution #S	618	14%	3,888	86%	4,506
Institution #T	62	6%	923	94%	985
Total	16,702	33%	34,221	67%	50,923
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Table 35. Distribution of Full-time/Part-time Students in the Nine Surveyed PHEIs

Source: Author's calculations Survey Data 2009/2010

The analysis of the part/full time students can be expanded to the top-ranked 20 PHEIs since I have data on them from the special GUS report (See Table 36). The surveyed institutions are included in this analysis but all data for this analysis are taken from the GUS database. The increase of the number of top-ranked PHEIs may help to show internal diversification among the top-ranked PHEIs. The average percent of fulltimers for the 20 top-ranked PHEIs is 25%. Although this is higher than the average percent of full-timers in the private sector but it is only 8% higher and indeed only eight of the 20 institutions have higher percentages of full-timers (above 17%) than the private sector average.

The table's data shows impressive correlations as we move toward the high end of the top-ranked PHEIs list. Four out of five top PHEIs have a full-time enrollment close to 50% whereas the bottom five PHEIs' average full-time enrollment equals 17.5%--almost identical to the full-time enrollment in the private sector. Five PHEIs from the first ten ranked have full-time enrollment around 50% whereas only one PHEIs from the second ten PHEIs has full-time enrollment close to or above 50%. (As it happens, ministry scholarships will not conform to this correlation.)

Private HE	Number of	Percent of	Number of	Percent of	Total
Institutions	Full-time	Full-time	Part-time	Part-time	Number of
	Students	Students	Students	Students	Students
Institution #A	2,732	45.4%	3,284	54.6%	6,016
Institution #B	5,974	52.6%	5,376	47.4%	11,350
Institution #C	298	5.9%	4,727	94.1%	5,025
Institution #D	1,483	52.7%	1,331	47.3%	2,814
Institution #F	2,266	52.7%	2,034	47.3%	4,300
Institution #G	93	4.6%	1,932	95.4%	2,025
Institution #H	1,055	23.6%	3,422	76.4%	4,477
Institution #I	842	9%	564	40.1%	1,406
Institution #J	1,409	12.6%	9,756	87.4%	11,165
Institution #K	1,575	10.0%	14,176	90.0%	15,751
Institution #L	421	100.0%	0	0.0%	421
Institution #M	363	9.6%	3,424	90.4%	3,787
Institution #N	6,163	38.2%	9,969	61.8%	16,132
Institution #O	2,027	19.0%	8,653	81.0%	10,680
Institution #P	855	11.5%	6,603	88.5%	7,458
Institution #Q	812	13.5%	5,222	86.5%	6,034
Institution #R	2,227	23.3%	7,325	76.7%	9,552
Institution #S	835	16.5%	4,215	83.5%	5,050
Institution #T	100	9.0%	1,012	91.0%	1,112
Institution #U ⁶⁸	1,041	26.1%	2,955	73.9%	3,996
Total	32,571	25.3%	95,980	74.7%	128,551
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Table 36. Distribution of Full-time/Part-time Students in the 20 Top-ranked PHEIs

Source: Author's calculations Special Report GUS 2009

The intriguing findings on the impressive correlations between the percentage of full/part timers and PHEI rank led to my consideration of interviews which partially help to explain this phenomenon. Interviewed rectors of the top-ranked PHEIs emphasize that they have higher numbers of full-time students than most PHEIs—and that in Poland the

 $^{^{68}}$ Table 36 includes PHEI ranked #U due to the exclusion of the PHEI ranked #E, as explained in chapter 3 under the Pilot Test section.

quality of HEIs is measured by the share of full-time students. Furthermore, interviewee #B emphasizes that his top-ranked private institution tries to have a high number of full-time students because the "value added" through studying is much higher for full-timers than part-timers due to the fact that full-timers spend much more time studying and are much more involved in academic life.

The high quality of the student body of top-ranked PHEIs is further supported by the reality that many of the full-time students could have accessed some public university, where programs are free, quite in contrast to their reality in their private universities (and to part-time programs in both private and public places).

5.2.5.3 Ministry Scholarships

The ministry scholarships indicator was used to evaluate intersectoral private-public differences in chapter 4. Similarly, I analyze this indicator to see potential intrasectoral differences between top-private HEIs and average PHEIs now in chapter 5. As mentioned in chapter 4, the ministry scholarships are given by specific ministries who define their own criteria and give the scholarships directly to students. These scholarships are prestigious awards won in competitively judged competition. I focus on the scholarships given by the Ministry of Science and Higher Education because this Ministry gives annually the largest number of scholarships, indeed the great majority.

Analysis of the ministry scholarships further supports the hypothesis that topranked surveyed PHEIs have a more selective student body than average privates. As table 37 illustrates, five students from the nine surveyed PHEIs received the ministry scholarship in sport and nineteen students received the ministry scholarships in learning (academic year 2010/11). This amounts to 13% of the ministry scholarships in sport and

24% of scholarships in learning out of all scholarships given to students from PHEIs⁶⁹. It

is an impressive achievement taking into consideration that they educate only 8% of PHE

students.

Table 37. Ministry of Science and HE Scholarships to Students from the Surveyed Institutions

Private HE	Number of Students Receiving					
Institutions	Scholarships	Scholarships for Achievements in				
	"Sport"	"Learning"	Total			
Institution #A	-	2		2		
Institution #B	1	1		2		
Institution #F	-	1		1		
Institution #H	-	3		3		
Institution #I	-	-		0		
Institution #P	-	5		5		
Institution #R	-	7		7		
Institution #S	4	-		4		
Institution #T	-	-		1		
Total	5	19	2	25		

Source: Author's calculations the Ministry of Science and Higher Education Data 2010/11

I go a step further to see the outcomes for the twenty top-ranked PHEIs. Students from this group of 20 PHEIs (including the nine surveyed PHEIs) received 32% of the ministry scholarships in sport and 39% scholarships in learning out of all scholarships given to students from PHEIs (See Table 38). Again, the achievement is formidable taking into consideration that these PHEIs educate only 20% of PHE students. Again, however, we have strongly differentiated data but on an indicator that is not strong. **Table 38**. Ministry of Science and HE Scholarships to Students from the Surveyed PHEIs, Top-ranked 20 PHEIs, and other PHEIs

Private HE Institutions	Number	Number of Students Receiving Scholarships for Achievements in				
	"Sport"	%	"Learning"	%	Total	%
Nine Surveyed Private HEIs	5	13.5%	19	24.6%	24	21.0%
Top 20 PHEIs	12	32.5%	30	38.9%	42	36.8%
Other PHEIs	25	67.5%	47	63.1%	72	63.2%
All PHEIS	37		77		114	

Source: Author's calculations the Ministry of Science and Higher Education Data 2010/11

⁶⁹ Students from the public sector received 70% (89 out of 126) of the ministry scholarships in sport and 92% (935 out of 1,012) of scholarships in learning out of all scholarships given to students in academic year 2010/2011.

On the other hand, on this indicator we do not see a correlation of increasing scholarships as we approach the height of the top-ranked as we saw for the indicator on percentage of full/part time students. From the sample of nine PHEIs, it is three of the bottom four that have the highest numbers of award winners. Partially, this pattern can be explained by the size of institutions as institution #P, #R, and #Q are larger than institutions #F, #H, #I, and #T.

The number of scholarships received by the nine surveyed PHEIs can be compared also to public HEIs (See Table 39). The results show that students from the nine PHEIs receive on average fewer scholarships than students from public HEIs (while controlling for enrollment⁷⁰). However, for all these comparisons the scholarships/enrollment indicator is limited because the numbers are very small. Ministry scholarships are selective and few.

Table 39. Ministry of Science and HE Scholarships to Students from the Surveyed PHEIs, Other PHEIs, and Public HEIs

HE Institutions	Number of Scholarships	Enrollment	Scholarships/ Enrollment			
Nine Surveyed Private HEIs	24	50,923	0.00047			
Other PHEIs	114	582,174	0.00019			
Public HEIs	1,024	1,266,917	0.00080			
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Source: Author's calculations the Ministry of Science and Higher Education Data 2010/11

Although ministry scholarships were not mentioned by interviewees, other scholarships were mentioned. One observation was that some top-ranked PHEIs try to offset the tuition gap by offering scholarships and tuition waivers for the most talented students. Interviewee #A says that in his university the best students do not pay tuition at

⁷⁰ I controlled for enrollment while presenting data on scholarships in order to make sure that the number of scholarships is not basically a function of institutional size as opposed to quality.

any point during their whole program. The same strategy is used also by top-ranked institution #B which offers fifteen scholarships for the most talented students through the whole program with a standard requirement that they have to pass all exams each semester (but maintaining a high GPA is not required)⁷¹.

5.2.5.4 Tuitions and Fees

No tuition and fees indicator is used in the evaluation of intersectoral differences in private and public sectors in the chapter 4. Obviously, tuition is higher in PHE than in public HE because there is no tuition for full-time public study; only part-time programs are paid ones. So the measuring of tuition and fees as an indicator of quality of the student body is new to chapter 5.

As table 40 shows, the seven surveyed top-ranked PHEIs (for two institutions data were not provided) charge from \$620 USD for Level I programs to \$1,435 USD for Level III programs in academic year 2010/11. Level I refers to Bachelor programs (full-time or part-time), Level II to Master programs (full-time or part-time), and Level III to Ph.D. (Although PHEIs show their tuitions for Ph.D. programs only two of these five institutions offered Ph.D. programs in academic year 2009/2010.) The average of the four top-ranked PHEIs is \$1,570 USD for full-time bachelor program versus \$790 USD for the bottom three PHEIs.

⁷¹ The public HEIs also offer need-based and merit-based scholarships for their students even if the students do not pay tuition. The need based scholarships may help students to pay costs of meals or accommodation. The merit-based scholarships are given to students for their accomplishments in academic work and sports, including a program where the minister confers the awards.

The differences in tuition charged can be partially explained by the fact that the highest ranked PHEIs have their main campuses in Warsaw⁷² whereas the bottom three institutions, like many other PHEIs, have their main campuses outside Warsaw.

The differences in tuitions charged are visible not only for comparisons among institutions. They are also visible in part-time programs tend to cost less than full-time programs.

Whereas tuition as an indicator of student quality is a source of debate, there can be no debate that we see a sharp stratification between the high and low ends of the top twenty PHEIs.

Table 40. Tuitions and Fees (in zl & \$ currencies) in Surveyed PHEIs (Academic Year 2010/11) per Semester

Private HE	Level I	Level I	Level II	Level II	Level III	Level III
Institutions	Programs	Programs	Programs	Programs	Programs	Programs
	(Bachelor)	(Bachelor)	(Master)	(Master)	(Ph.D.)	(Ph.D.)
	Full-time	Part-time	Full-time	Part-time		
Institution #A	1,300 USD	978 USD	1,300 USD	978 USD	-	1,300 USD
Institution #B	1,800 USD	1,532 USD	2,005 USD	1,610 USD	-	1,955 USD
Institution #H	890 USD	680 USD	875 USD	735 USD	-	-
Institution #I	2,280 USD	1,565 USD	2,605 USD	1,630 USD	1,435 USD	1,435 USD
Institution #P	1,040 USD	850 USD	1,045 USD	935 USD	-	795 USD
Institution #R	720 USD	540 USD	730 USD	630 USD	-	-
Institution #S	620 USD	620 USD	645 USD	645 USD	-	-
Average	1,215 USD	965 USD	1,315 USD	1,023 USD	1,435 USD	4,372 USD

Source: Author's calculations Survey Data 2009/2010

One interviewee, rector of top-ranked institution (#A) discussed relationships between students' social-economic backgrounds and ability to pay tuitions, arguing that most of their students come from the small and medium middle-class enterprises. Those families can afford paying and at the same time encourage their children to be innovative, sometimes opening their own businesses even while still in college. Consequently, the

⁷² As the capital of Poland, Warsaw is more expensive in terms of infrastructure and salary expectations. Additionally, the population is wealthier in Warsaw so students are able to pay higher tuitions than in other cities. Thus PHEIs located in Warsaw charge more tuition than institutions located elsewhere.

rector emphasizes, the university has many highly motivated, ambitious and hardworking students.

5.2.5.5 Summary of Interviews

Although a majority of interviewed scholars supports the hypothesis that top-ranked private institutions have a relatively higher quality student body than average privates do, there is strong disagreement among interviewees over the share of good students enrolled in top privates. The crux of the dispute concerns the degree of diversification of the student body in top-private institutions.

The interviewed rectors claim that they have high quality student bodies in which most of their students are far above students in average PHEIs--and comparable to students that apply for admission to the best public universities. The rector of top-ranked private institution #A admits that they are not extremely selective during the first year of the program because 15% of students drop out and another 15% drop out before the end of the program. But he also claims that the tough evaluation of their own students guarantees the high quality of student body and at least implies a certain edge over public universities.

Yet an interviewed a faculty member at top-ranked private institution #C says that any student with a high school diploma is accepted and many students are not prepared for academic requirements in the first year of study. This statement is supported by other interviewed faculty members teaching in both top-ranked private and public institutions and who are less enthusiastic about the quality of the student body in top-ranked private institutions than are the rectors of these institutions. They insist that, although top-ranked privates are able to attract some great students, the majority of their students are not as

prepared academically as their counterparts in the best public universities. Thus, it is hard to achieve a high quality of teaching in top-ranked privates but still these institutions have a higher quality of student body than do average PHEIs. This contrast between topranked PHEIs and average PHEIs is supported by another interviewee (#I) who claims that about 95% of private institutions accept anyone who has a high school diploma but that 5% may have much higher entrance requirements. In contrast, he says, the top public institutions have the highest entrance requirements followed by the good publics followed by the 5% of top PHEIs, with average privates firmly at the bottom.

But deference to the notion of public sector quality is not uniform. One of the nationally well-known faculty members (#1) declares that good public institutions can have the same problems as top-ranked privates in attracting uniformly excellent students. The concern is aggravated with demographic decline: the best students go to the best publics, leaving average publics to accept much less qualified students, though they try to hide this fact as much as they can. There is a notion in Poland that public institutions have great students and provide excellent education; nowadays, average publics do not necessarily validate this assumption but do not want to admit this. Public HEIs, the interviewee continues, often "float on myths." Even where the myths were once true, they are now dubious for average publics. Part of the way the average public institutions try to look like the mighty myth is to compare themselves favorably to PHEIs. This assertion echoes global literature claims (Levy 2010a) that some public sector institutions look down upon PHE or are hostile to them. Furthermore, in many countries there is a large intrasectoral variation within the public sector, myths notwithstanding (Levy 2010a).

Thus, in this assessment, top-ranked privates do not so strongly outperform average privates as to be on par with top public universities but where they stand relative to other public universities is debatable. Be that as it may, the top-ranked privates surpass average privates enough to support the basic hypothesis of distinctiveness on Student quality.

5.2.5.6 Conclusion

Reflecting the postulated global semi-elite characteristics of student quality, my findings display comparable characteristics of top Polish PHEIs and those identified in the international formulation and examples to date. Polish top PHEIs have the semi-elite characteristic of high student status and quality compared to average PHEIs. They have a much higher percentage of full-time students, which, along the lines of Levy's (2009) makes them in this respect more like public universities. Similarly, Polish findings support the semi-elite prediction of having students from quite high social background, and also including those capable of paying ample private tuitions. Many Polish students enrolled in the top PHEIs come from families with high social background able to pay the subsector's high tuition. The Polish case findings are parallel in these respects to findings from the other major national case study of semi-elite, the Thai study⁷³.

In addition, my findings on the competitive and prestigious ministry scholarships are that the top-ranked PHEIs have a notably higher share than other privates, but we have reservations about the indicator and in any event the top-ranked percentage trails the public average.

⁷³ Praphamontripong (2010) reports that some Thai semi-elites enroll approximately 60-70% of students coming from middle and upper classes.

5.2.6 Faculty Quality

I hypothesized that there are intrasectoral differences in faculty quality in the private HE sector with faculty quality being higher in the top-ranked PHEIs than in the average PHEIs.

This hypothesis is built on Levy's (2009b) assertion that "semi-elite institutions recognize that to teach well and to attract good students, they need a good and improving faculty."⁷⁴ He argues that semi-elite institutions may invest in professional development of faculty members but nevertheless need to employ part-time faculty, both to save funds and to provide practical knowledge crucial on the labor market (Levy 2009b). However, their employment patterns would be in strong contrast to demand-absorbing privates, which rely overwhelmingly, sometimes exclusively, on part-timers. As always, Levy does not propose a formal hypothesis, but gives us elements on which we could form ours.

5.2.6.1 Indicators

As mentioned in chapter 4, most indicators commonly used to measure faculty quality like highest academic degree achieved or number of publications is not used for this analysis due to limitations with collected data. However, fortunately, despite these limitations, we can analyze other intrasectoral indicators of faculty quality. The first two relate to the part-time vs. full-time dimension. My survey provides the numbers on full/part time faculty by PHEIs. This indicator is commonly used in global literature to measure quality of HEIs. As discussed by Levy (2004; 2010), most PHEIs globally limit their numbers of full-time faculty due to financial constrains dictated by tuition

⁷⁴ Silas (2008) provides an example of semi-elite institutions in Nuevo León which are keen that faculty enhance skills and are advanced in use of teaching technologies.

dependency. But he claims that there are intrasectoral differences between the employment patterns within PHE, including on the full/part time dimension and the semielite quest for academic weight and legitimacy (Levy 2004; Levy 2009b). Thus employment of a core of full-time faculty could be a way to differentiate themselves from average PHEIs. In short, we have our typical "largely similar but notably distinctive" motif in hypothesizing that top-ranked Polish PHEIs count mostly on part-timers but have more full-timers than do demand-absorbing PHEIs.

Unfortunately, as spelled out below in my findings, the official time categories of full/part time have major flaws in the Polish case, as also in at least some other Eastern European countries. But I develop a related second indicator—a powerful one: number of faculty employed by "primary workplace." Data on primary workplace are shown in the Polish national dataset. And this indicator may prove cross-nationally appropriate in measuring employment patterns for countries in which multiple and intersectoral employment is common among faculty members. With the post-Communist massification of higher education, demand for qualified faculty members dramatically increased in many Eastern European countries including Poland (Kwiek 2004) as the rapid increases in private enrollment and numbers of PHEIs were not matched by similar increases of new faulty members. Accordingly, many PHEIs have had to employ faculty members for whom public HEIs are "home institutions" providing secure employment, research opportunities, and frequently prestige that cannot be found in many PHEIs. Taking into consideration that semi-elite PHEIs strive to achieve academic legitimacy (Levy 2009b) I hypothesize that they try to ensure high faculty quality not only by hiring

good part-timers from outside academia and from public universities but also through hiring faculty for whom they are the "primary workplaces."

To the full/part time and primary workplace indicators, I add a third, which is expert testimony. The expert testimony provides additional flavor into analyses of faculty quality in the top-ranked PHEIs. It helps to go beyond statistical analyses and see how various internal higher education actors see and interpret employment patterns while pondering differences among PHEIs in Poland.

Thus, our analysis of intrasectoral difference in Faculty quality utilizes the same three indicators used in the previous chapter for analyzing intersectoral differences.

5.2.6.2 Full/Part Employment

The findings show that the surveyed PHEIs have a very high share of full-timers, 97%, and a very low share of part-timers, 3%. These are not surprising results because, as discussed in the previous chapter, the term full-time is very liberally applied and the reported numbers are given without including part-time *contracted* employment, which is what is commonly termed part-time in HE literature. Consequently, these figures here are similar to the findings reported in the previous chapter on intersectoral differences—overwhelmingly full-time. As Table 41 shows, all nine top-ranked PHEIs have more than 90% of their faculty as full-time, only one less than 96%.

Private HE Institutions	Number of Full- time Faculty	Percent of Full- time Faculty	Number of Part- time Faculty	Percent of Part- time Faculty	Total Number of Faculty
	Members	Members	Members	Members	Members
Institution #A	184	96.8%	6	3.2%	190
Institution #B	510	92.7%	40	7.3%	550
Institution #F	160	97.6%	4	2.4%	164
Institution #H	166	97.1%	5	2.9%	171
Institution #I	48	100.0%	0	0.0%	48
Institution #P	174	100.0%	0	0.0%	174
Institution #R	255	99.2%	2	0.8%	257
Institution #S	215	100.0%	0	0.0%	215
Institution #T	38	100.0%	0	0.0%	38
Total	1750	96.8%	57	3.2%	1807

Table 41. Distribution of Full-time/Part-time Faculty in Nine Surveyed PHEIs (31.XII2008)

Source: Author's calculations GUS Special Report 2009

A comparison of the employment patterns in the surveyed top-ranked PHEIs and in the private sector illustrates a lack of intrasectoral differences⁷⁵. As table 42 shows, both groups (top-ranked and average have percentages of full-time faculty close to 96-7% and percentages of part-time faculty between 3-4%. Similarly, the surveyed PHEIs have part/full time percentages almost identical with the public sector figures. Although one could see the top-ranked PHEIs' high share full-time and its proximity to the public sector average as supporting the semi-elite hypothesis about high faculty quality, in Poland all the figures convincingly tell us is that the full-time indicator is weak⁷⁶.

⁷⁵ The data presented above were taken from the GUS database, not from the survey, because surveyed responses were not sufficiently detailed to analyze the faculty part/full time distribution.

⁷⁶ Soon this situation might be changed due to a new Polish HE law. This law dictates that faculty members who work in two HEIs would have to receive annual consent from the rector of their primary workplace in order to be able to hold their second (full-time) position. Consequently, it is possible that faculty members will have to make a decision on which institutions they decide to work at full-time. Likely most will stay truly full-time in the public HEIs and only the best PHEIs will have a good chance to retain their full-timers. In this hypothetical case the full/part time indicator may become a very useful indicator for measuring quality of faculty members employed in Polish HEIs.

Polish HE	Number of Full-	Percent of Full-	Number of Part-	Percent of Part-
Institutions	time Faculty	time Faculty	time Faculty	time Faculty
Surveyed PHEIs	1750	96.8%	57	3.2%
Private	17,375	95.6%	792	4.3%
Public	82,691	96.7%	2,777	3.2%
Total	100,066	96.5%	3,569	3.4%

Table 42. Full-time/Part-time Faculty by Surveyed PHEIs and by HE Sectors

Source: Author's calculations GUS 2009 & GUS Special Report 2009

Thus, these results could be only mistakenly interpreted as contradicting Levy's claims about global employment patterns in PHEIs and Kwiek's (2004) discussion of employment patterns in Poland. Both authors emphasize that the majority of PHEIs hire part-time faculty who frequently hold full-time positions in public HEIs. However, as mentioned above, the part/full time indicator does not adequately illustrate the employment differences among HEIs for the Polish case. One reason we have already discussed is a lack of data on "true part-timers" and their multiple employments. Whereas the GUS categorization of data would have us believe that PHEIs have mostly full-time academic staff, our survey data give the lie to that. For example, data reported by one top-ranked institution (Institution #A) refer to 697 faculty of whom 205 are permanently employed full-time or part-time and 492 are employed only for a temporary period of time (staff on per-hour contracts who are not reported in GUS as we see in table 43 and as discussed in chapter 4). These data support the statement that PHEIs, even top-ranked ones, may well have a high proportion of staff hired on per-hour part-time contracts: twothirds of faculty members are hired on per-hour contracts in Institution #A. Although this example cannot be used to make a sure generalization, it certainly lends credence to the

educated guess that even the top-ranked institutions may follow the global pattern of having a large number of part-time faculty members.

5.2.6.3 Primary Workplace

Given the weak meaning of full time and the exclusion of true part-timers in the GUS national database, I move (as in the last chapter) to a primary workplace indicator, a good parallel to what would be classified as full time in other countries. As mentioned in the previous chapter, Polish law requires that faculty members designate one institution as their primary workplace if they are employed in more than one HEI.

The findings of my survey, juxtaposed to the GUS national data, show that the percentage of the total employed in a "primary workplace" is much higher for the surveyed PHEIs than for average PHEIs. The average share for the surveyed PHEIs is almost 65%. This is impressive for PHEIs. Table 43 shows substantial variation within the surveyed group with Institution number #H having the highest share, 96%, o and Institution #S having the lowest share, 39%.

Surveyed PHEIs	Number of Full-	Number of Primary	Percent of Primary
	time Faculty	Workplace Identification	Workplace/Total
Institution #A	No Response	No Response	-
Institution #B	No Response	No Response	-
Institution #F	132	68	51.5%
Institution #H	110	106	96.4%
Institution #I	No Response	No Response	-
Institution #P	189	161	85.2%
Institution #R	No Response	No Response	-
Institution #S	215	84	39.1%
Institution #T	65	41	63.1%
Total	711	460	64.7%

 Table 43. Primary Workplace Share in Surveyed PHEIs

Source: Author's calculations Survey Data 2009/2010

Table 44 proceeds to show how these high primary workplace figures at the surveyed PHEIs contrast to the reality at average PHEIs. The contrast is striking, 65% to

3%. Even the surveyed PHEI with the lowest percentage (39%) of its faculty designating it as the primary workplace outshines by ten times the average PHEI. If we exclude the data reported by five surveyed PHEIs from the private sector the contrast between the two groups is even more extreme: 65% to 0.7%.

Table 44. Total Faculty Employed in Primary Workplace by Surveyed PHEIs and by HE

 Sectors

Polish HE	Number of Full-	Total Employed in	Percent of Total
Institutions	time Faculty	Primary Workplace	Employed in Primary
			Workplace
Surveyed PHEIs	711	460	64.7%
Private	17,375	588	3.3%
Public	82,691	58,088	70.2%
Both Sectors	100,066	58,676	58.6%

Source: Author's calculations GUS 2009 & Survey Data

The survey and database findings are supported by the testimony of interviewed scholars who claim that top-ranked privates pay special attention to hiring qualified faculty for whom they are the first place of work. Consequently, as noted by one of the higher education accreditation specialists, top-ranked private institutions tend not to have problems with fulfilling the government requirements related to employment's standards discussed in chapter 3.

Moreover, a few top-ranked institutions in contrast to other privates have their own young faculty members⁷⁷. That is because some top-ranked PHEIs as mentioned above offer doctoral programs and habilitation opportunities. One interviewee (#A) says that his university not only mentors young faculty members but also sponsors in cooperation with the Fulbright Foundation one semester of professional experience for young faculty in the best U.S. universities like Harvard, Stanford, or Yale. This statement

⁷⁷ In contrast to scholarship on the US, Polish scholarship on the academic profession is friendly to the idea of institutions employing their own graduates. In Poland, being able to educate one's own graduates with Ph.D. or habilitation degrees is a sign of academic seriousness.

is also supported by an interviewee from the Fulbright Foundation itself who indicates that students and scholars from three or four top-ranked PHEIs apply and receive the Fulbright funds. Another interviewee (#C) emphasizes that his university puts a lot of effort into educating its own young faculty through offering doctoral degrees. In addition, this university offers paid leave for a period of a half-year or one-year for students who wants to work on their doctoral degrees and they are further encouraged to work on their habilitations.

Furthermore, an interviewed rector (#A) emphasizes that in his institution the quality of faculty body is regulated by hiring qualified faculty and firing those who do not meet university's quality requirements. Without of course presuming to know the degree of validity in his statement, we note his claim that flexible employment policy ensures that *"the university is not a shelter for unqualified and unmotivated faculty in contrast to many public universities. Of course there are a few so called "holy cows" in the faculty body but overall the university pays special attention to the quality of faculty and there is no protective umbrella for employees; consequently, inefficient faculty members are fired."*

Despite the fact that several interviewees support the hypothesis about the high quality of faculty body in top-ranked PHEIs, some interviewees have concerns that faculty members may not be enough committed to their jobs in PHEIs even in the topranked one. One interviewee (#B) emphasizes that even in the best PHEIs faculty tend to be like "*sparrows: they come and go without spending enough time with their students.*" However, this is not an assessment of limitation that is universally reported. Interviewee (#B) also says that in his Warsaw institution faculty members spend substantial amounts

of time working with students and collaborating. In this situation, most of the faculty members reportedly work and live in Warsaw so they tend to have more time to devote to their work in the PHEI. This suggests one important reason that top-ranked PHEIs may have more fertile soil in major metropolitan areas. Overall, however, we discover no consensus among interviewees about the time devotion for teaching in top-ranked PHEIs.

5.2.6.4 Conclusion

The analysis of indicators used for evaluation of intrasectoral differences in faculty quality between top-ranked and average PHEIs provides mixed results but tilting toward the conclusion that the differences are major. Despite the limited differences on percentages of full/part time faculty the evaluation of the number of faculty hired in primary workplaces clearly illustrates an impressive distinction (70% to 3%) between the surveyed top-ranked PHEIs and average PHEIs, placing the former on a par with the public average. It is certainly reasonable to believe that such findings support the hypothesis about semi- elite faculty quality. Being able to hire faculty members who choose a PHEI as their primary workplace indicates that these PHEIs provide stature and good employment benefits competitive with those at public HEIs to some degree. However, there are other plausible explanations. It is possible that top-ranked PHEIs are able to attract older faculty members who do not mind spending the last five or so years of their careers teaching in PHEIs while earning good salaries. This speculation is supported by the interviewee (#I) who cautions that faculty in their mid-careers are unlikely to change their positions from public HEIs to PHEIs.

Moreover, the testimony of interviewed scholars reveals polarized opinions about faculty quality in the top-ranked PHEIs. Some scholars claim that top-ranked PHEIs

nurture a culture and reality of high faculty quality but other question the dedication of faculty to their jobs in PHEIs and thus hesitate to state a firm positive opinion about faculty quality.

5.2.7 Funding Sources

I hypothesized that top-ranked PHEIs generate most of their revenue from tuitions and fees but have more diverse sources of finance than average PHEIs. Thus this is one of my hypotheses with two explicit parts. I first analyze the similarities between top-ranked PHEIs and the private sector and then differences between the two groups. The hypothesis's first part develops from the premise that semi-elite institutions as other privates build their revenue mostly based on tuitions and related students' fees (Levy 2009b). Its second part derives from Levy's (2009b; 2010) suggestion that semi-elites are more diverse than most PHEI in their income sources, even with some government resources.

5.2.7.1 Indicators

Unfortunately, there are not sufficient data on funding sources for the top-ranked PHEIs or average PHEIs for the Polish case. Thus, while we had quite adequate data for chapter 4's comparison of sectoral averages, no database provides data on individual institutions or sub-sectoral groups of institutions.

And since neither the GUS national dataset nor the GUS Special Report gives data on funding sources for individual institutions or groups of institutions, the only data we have in this regard is that produced by my survey of top ranked PHEIs. Moreover, even that survey includes only one question about sources of finance. There are two main reasons for this limitation in my own survey and they echo reasons for the lack of

information in the national databases. First, institutions are reluctant to share their financial data. So additional questions could have threatened a decreased response rate for the survey overall. Second, the sectoral data presented in chapter 4 clearly indicate that PHEIs receive very little support from the government and that most of their income comes from tuitions and fees; in other words, there might not be much financial source variation to explore. However, perhaps there is there may be enough variation for the top-ranked institutions to be distinctive.

Chapter 4 employed three indicators on funding source: percentages of income from each source, funds for teaching activity⁷⁸, and funds for research activities. However, for the internal analysis of the private sector I focus only on funds for research activities. That is because these funds are the only government funds for which PHEIs can compete among each other and with public HEIs⁷⁹. PHEIs do not have direct access to governmental subsides. Additionally, as mentioned, we were not sanguine about survey response rates on financial matters.

5.2.7.2 Research Funding Sources

Although the nine surveyed top-ranked PHEIs indicate that their percentage of revenue from research activities is very low, they receive research funding from diverse sources. As table 45 illustrates, eight out of nine PHEIs receive funds for research activities from the government. In addition, six out of nine PHEIs (three did not answer the survey question related to the funding sources for research activities) reported receiving funds

⁷⁸ I evaluate different types of revenue (revenue from teaching activities, from research activities, from business/economic activities) regardless of the sources of the revenue (governmental vs. own vs. international funds) in section 5.1. I focus on sources of revenues from governmental vs. own vs. international funds in section 5.7.

⁷⁹ Data were not collected on other research funding sources like business contracts or donations that could possibly be available for PHEIs.

for research activities from international organizations and from other sources. Thus, the surveyed top-ranked PHEIs are involved in research but the magnitude of involvement is not measured by this indicator because we do not know the amounts of funds received by them⁸⁰. These findings are supported by interviews which indicate that a high portion if not all of revenues of most PHEIs come from tuitions but a few top-ranked institutions receive also governmental and non-governmental money for research, which complements their incomes. This differentiates the small group of PHEIs from the average PHEIs. Thus the second part of the hypothesis is sustained but only limitedly because findings focus only on research sources of funds and do not show the amount of funds.

Private HE				
Institutions	Sources of Funds Received for Research Activities			
	From	From	From Other	
	Government International		Sources	
		Organization		
Institution #A	Yes	Yes	Yes	
Institution #B	Yes	No Response	No Response	
Institution #F	Yes	Yes	Yes	
Institution #H	Yes	Yes	Yes	
Institution #I	Yes	No Response	No Response	
Institution #P	Yes	Yes	Yes	
Institution #R	Yes	No Response	No Response	
Institution #S	Yes	Yes	Yes	
Institution #T	No	No	No	
C A (1	2 1 1 ^{(*} C	D + 2000		

Table 45. Sources of Funds Received for Research Activities by Surveyed PHEIs in Year

 2008

Source: Author's calculations Survey Data 2008

5.2.7.3 Conclusion

These findings clearly and strongly support the first part of the hypothesis, which is that top-ranked PHEIs, as other privates, build their revenues mostly from tuitions and related

⁸⁰ The involvement of international organizations may suggest something about a serious (albeit not extensive) research effort.

students' fees. But the findings only partly support the second part of the hypothesis. The top-ranked PHEIs do not have various sources of funds for teaching activities⁸¹ but they do diversify their sources of funds for research activities. To receive any funds for research shows a likely difference from average PHEIs. As discussed in the Primary function hypothesis, even top-ranked PHEIs are teaching and training based, though some endeavor to make some mark in research. When it comes to Source of Funds, our findings are very strong on similarities between top-ranked PHEIs and the sector but much weaker in showing differences between the two.

5.2.8 International Orientation

I hypothesized that Polish top-ranked private institutions are more internationally oriented than average privates and perhaps more than average publics.

This hypothesis is based on the small literature on semi-elite institutions, which indicates that semi-elites pursue internationalism often in contrast to average PHEIs as well as in contrast to public universities' historically pointed and proud emphasis on national status (Levy 2009b). Levy's evaluation of East Asian PHEIs indicates that some semi-elite institutions vigorously establish a variety of international ties and agreements. They may invite foreign visiting professors and attract many students from elsewhere in Asia as well as from Africa. Furthermore, in the South Asian region and also the Eastern European and other regions, many institutions that call themselves the "American University" of such and such a country are likely semi-elites institutions (Levy 2009b). All of the above examples illustrate that semi-elites' international orientation is based on

⁸¹ This issue was not directly studied in this research but my sure understanding is that tuitions and fees are the major sources of funds for teaching activities in all PHEIs, even the top-ranked one.

creating international partnerships, enrolling foreign students, hiring or inviting foreign faculty members, and/or having foreign names⁸².

5.2.8.1 Indicators

Thus, I explore the hypothesis about the differences in International orientation between top-ranked PHEIs and other institutions through international orientation indicators related to numbers of international students, exchange program students, international partnerships and accreditations/certifications. The quantitative findings are complemented by qualitative findings based on the expert testimony in interviews.

As noted in chapter 4 there is no easy way to gauge intersectoral differences in the international orientation of HEIs due to a lack of data directly on internationalism of HE in Poland. The GUS database contains little of help. Thus the private-public comparison in chapter 4 was based on only two indicators--number of international students and number of international graduates. I use the first again in chapter 5 but although the second is also valuable it cannot be fueled with data from individual Polish institutions. However, intrasectoral analysis benefits due to my adaptation of multiple data sources. For the first indicator, the number of international students, I add my survey results for top-ranked PHEIs to the GUS data on average PHEIs. For three additional indicators (numbers of exchange program students, international partnerships, and accreditations/certifications) I present data only for the top-ranked PHEIs because data for the total private sector are not available. Consequently, a direct comparison between the top-ranked PHEIs and the private sector is possible for only the first indicator

⁸² The international orientation of semi-elite institutions can be tied to factors related to being entrepreneurial, market-oriented, competitive, seeking novel avenues, and looking toward international markets.

(number of international students). Additionally, of course I present testimony from interviews. Taken together, the indicators used in this research for analyzing internationalism are strong.

5.2.8.2 International Students

The findings on the number of international students support the hypothesis that the topranked surveyed PHEIs are more internationally oriented than average privates. Of all students in the top-ranked privates, 3.3% are international. As shown in chapter 4 the PHE average is below 1%. A lead of 2% is not so impressive but brings a figure three times that in PHE overall.

Table 46 illustrates that there is major variation among the top-ranked PHEIs in terms of the number of international students. Some of the top-ranked privates like Institutions #F and Institution #R have 8-9% of their students being international. Others do not have even 1%. This finding triggers speculation that internationalism may not be a necessary factor in top-ranked PHEIs (and so is problematic as part of the definition of semi-elite) but is a formidable *option*. Some top-ranked PHEIs clearly choose an international route to distinctiveness and distinction whereas others do not invest in internationalism. A few factors can help explain variation in use of the internationalism option. Some PHEIs probably strive to distinguish themselves from public and other PHEIs and thereby attract more prospective students. For example, Kozminski University is not only the only PHEI but also the only institution in either sector that has three prestigious international business accreditations. Having these accreditations helps with competing with public HEIs not only due to attractiveness of international programs but also due to the academic legitimacy that comes with accreditations. Clearly in this case

the international accreditations increase the overall academic legitimacy of the PHEI, including nationally.

Geography is a second factor that can help to explain variation in the number of international students enrolled in top-ranked PHEIs. For example, Institutions #I and #R have high percentages of international students because they are located near the eastern boarder of Poland. These institutions may have problems with attracting many top Polish students due to their locations (not in Warsaw) or international students from Central or Western Europe or even China while they can attract students from neighboring Eastern European countries, such as Ukraine and Belarus, which are poorer and without powerful higher education systems⁸³. Although we are analyzing here internationalism, we should keep in mind that some niche PHEIs are quite field-based and this can affect their international orientation. For example, Institution #B is highly ranked and is social science focused but possibly fields psychology do not attract foreign students as business or technical studies do.

Surveyed Private HE	International	Percent of
Institutions	Students	International
		Students
Institution #A	184	3.2%
Institution #B	134	1.1%
Institution #F	355	9.0%
Institution #H	121	2.9%
Institution #I	92	5.8%
Institution #P	20	0.2%
Institution #R	710	7.6%
Institution #S	62	1.4%
Institution #T	2	0.2%
Total	1680	3.3%

 Table 46. International Students in Surveyed PHEIs in 2009

Source: Author's calculations GUS Special Report 2009

⁸³ The statement that border PHEIs serve more international students is based on two points: first, I know which top-ranked PHEIs are border ones so I can estimate how many international students they have and second, the interviewees including a president of a border college making this statement. Additionally, prospective students from neighboring countries have easier access to border colleges than they have to colleges located farther inside the country.

If we go further and exclude the nine surveyed institutions, the comparison is even starker between the top-ranked and other PHEIs. As table 47 illustrates the nine surveyed institutions, which educate only 8% of PHE students, educate 38% of the sector's international students. This finding clearly shows that the top-ranked privates are much more internationally oriented than other PHEIs in Poland. They even outdistance the public sector. The public sector is barely higher in its share of international students than in its share of total enrollment whereas the top-ranked PHEIs are more than three times higher in their international than their total enrollment share. With only 2.6% of the system's total enrollment the top ranked PHEIs educate some 10% of its international population. This evidence powerfully supports the semi-elite hypothesis on internationalism.

Table 47. International Students in Surveyed PHEIs and in the Private and Public Sectors (2009)

Number of	Percent of	Percent of	Percent of	
International	International	International	Enrollment	
Students	Students	Students within		
	within HE	the Private Sector		
2,745	16.1%	62.0%	30.6%	
1,680	9.8%	37.9%	2.7%	
12,575	73.9%		66.6%	
4,425	100.0%	100.0%	100.0%	
	International Students 2,745 1,680 12,575	International StudentsInternational Students within HE2,74516.1% 1,68012,57573.9%	International StudentsInternational StudentsInternational Students within the Private Sector2,74516.1%62.0%1,6809.8%37.9%12,57573.9%1000000000000000000000000000000000000	

Source: Author's calculations GUS 2009 & GUS Special Report 2009

The findings from the interviews square with the quantitative findings as they further illustrate that Polish top-ranked PHEIs are internationally orientated. The majority of interviewees emphasize that top privates are interested in attracting international students because having a diverse student body is a sign of quality and reputation. Thus some top-ranked may not only try to enroll international students for entrepreneurial reasons but also in order to increase their academic status as well. In order to attract international students, top-ranked institutions use various methods to ensure that foreign students know about Polish institutions and know that they provide good quality education in a friendly environment. According to interviewed rectors, the strategies of attracting international students depend on the types of students that individual PHEIs want to lure. For example, if an institution focuses on attracting students only from Eastern European countries then courses do not have to be taught in English due to the fact that Eastern European students from several countries (Latvia, Ukraine, Belarus, and even Russia) can relatively easily understand Polish. However, if an institution like Institution #A, wants to attract students from the whole world then courses taught in English are certainly required.

5.2.8.3 International Partnerships

My survey finds that top-ranked PHEIs have a mean of 52 international partnerships established with foreign HEIs (See Table 48). Institution #A easily leads within the surveyed group by having 140 partnerships with foreign HEIs which is almost three times more than the average number of partnerships established by surveyed PHEIs. This drastically contrasts with Institution #T, which has only four such partnerships. Again we see major variation even with the group of nine; Poland's top-ranked private universities are far from a homogenous lot. Overall, the ranking of an institution is positively correlated with the number of international partnerships. The top-ranked institutions have more international partnerships than PHEIs ranked from 15th-20th

places⁸⁴.

Table 48. Number of International Partnerships by Surveyed PHEIs

Surveyed Private HE	Number of International	
Institutions	Partnerships	
Institution #A	140	
Institution #B	66	
Institution #F	74	
Institution #H	44	
Institution #I	52	
Institution #P	57	
Institution #R	19	
Institution #S	17	
Institution #T	4	
Average	52	
Total	473	

Source: Author's calculations Survey Data 2009/2010

These survey findings also are supported by the interviews' findings. According to interviewed scholars some top-ranked PHEIs build partnerships with universities in foreign countries from which they want to attract students. For example, PHEI number #C has partnerships with colleges from Russia, Belarus, and Ukraine for this reason⁸⁵.

5.2.8.4 International Accreditations and Certifications

The survey findings on number of international accreditations and certifications⁸⁶ show that on average the surveyed PHEIs have three international accreditations and two international certifications. Overall, these numbers might suggest the involvement in the internationalism of the top-ranked PHEIs taking into consideration that many of the

⁸⁴ The size of an institution could influence its number of international partnerships but this indicator of international orientation is not as size sensitive as the number of international students; thus I do not size-adjust it.

⁸⁵ Partnerships not only help with increasing the popularity of a college and recruiting students but also support exchanges of ideas and experiences between faculty members.

⁸⁶ The meanings of international accreditations or certifications were not defined in the survey. The PHEIs were asked to indicate whether they have any accreditation or certification given by international entities.

accreditations/certifications have strict requirements. However, examination of individual institutions shows that only few institutions have *any* international accreditations or certifications (See Table 49). Only three out of nine PHEIs have international accreditations and four out of nine have international certifications. Institution #G and #R lead in number of external sources of quality assurance accolades. In contrast, five institutions do not have any international accreditations or certifications. According to the interviewees, the variation in the number of international accreditations/certifications can be partially explained by the mission of an institution, location of an institution, and requirements of the accreditation/certification. While analyzing the findings, it is important to remember that various international entities may evaluate institutions and programs using different criteria so a direct comparison of a number of international accreditations/certifications and programs using the requirements.

Surveyed Private HE	Number of	Number of	
Institutions	International	International	
	Accreditations	Certifications	
Institution #A	0	3	
Institution #B	0	0	
Institution #F	5	6	
Institution #H	15	5	
Institution #I	0	0	
Institution #P	0	0	
Institution #R	13	8	
Institution #S	0	0	
Institution #T	0	0	
Average	3	2	
Total	33	22	

Table 49. International Accreditations and Certifications Held by Surveyed PHEIs

Source: Author's calculations Survey Data 2009/2010

5.2.8.5 Exchange Programs

The number and share of exchange students in contrast to total enrollment clearly further discovers intrasectoral differences within the group of nine surveyed PHEIs. As table 50 shows, the three top-ranked PHEIs from my survey have had between 88 and 152 students participate in exchange programs. The next three PHEIs have between 30 and 40 students, and the last three PHEIs have a total of only five among them.

Analysis of percent of exchange students to total enrollment also strongly supports the finding of large differences within the surveyed group. Three out of nine PHEIs have a ratio of exchange students to total enrolment above 2%, two have around 1%, and four have ratios below 0.5%.

Surveyed Private HE	ed Private HE Number of Students who Used the		
Institutions	School's International Exchange	Exchange	
	Programs in Academic Year	Students to Total	
	2009/10?	Enrolment	
Institution #A	152	2.6%	
Institution #B	112	0.9%	
Institution #F	88	2.2%	
Institution #H	33	0.8%	
Institution #I	40	2.5%	
Institution #P	31	0.4%	
Institution #R	1	0.0%	
Institution #S	4	0.1%	
Institution #T	0	0.0%	
Total	461	0.9%	

Table 50. Number and Percent of Students Participating in International Exchange

 Programs by Surveyed PHEIs in Academic Year 2009/2010

Source: Author's calculations Survey Data 2009/2010

Again the interview' findings corroborate the surveyed findings. The interviewed rectors of top-ranked PHEIs encourage their students to participate in the Erasmus (European Region Action Scheme for the Mobility of University Students) program and Fulbright scholarships. The Erasmus Project is a European Union student exchange program that helps students to study between three and twelve months in a foreign HEI.

The Fulbright program offers different scholarships/awards for talented Polish students who want to get studying and research experiences in the United States. The selfdeclarations of the rectors are supported by the interviewed Fulbright specialist who asserts that a few top-ranked PHEIs support their students in receiving the Fulbright scholarships and are prepared for accommodating foreign students and scholars.

There is a logical question whenever we have multiple indicators: do the institutions that score high on some indicators also score high on others? If so, then we clearly discern high international institutions. If not, then it is more complex to think about but maybe different institutions pursue their international orientation through different options.

Surveyed Private	Number of	Ratio of	Ratio of	Number of	Number of
HE Institutions	International	International	Exchange	International	International
	Partnerships	Students to	Students to	Accreditations	Certifications
		Total	Total		
		Enrolment	Enrolment		
Institution #A	140	3.2%	2.6%	0	3
Institution #F	74	9.0%	2.2%	5	6
Institution #B	66	1.1%	0.9%	0	0
Institution #P	57	0.2%	0.4%	0	0
Institution #I	52	5.8%	2.5%	0	0
Institution #H	44	2.9%	0.8%	15	5
Institution #R	19	7.6%	0.0%	13	8
Institution #S	17	1.4%	0.1%	0	0
Institution #T	4	0.2%	0.0%	0	0
Total	473	3.3%	0.9%	33	22

Table 51. Multiple International Indicators by Surveyed PHEIs in Academic Year

 2009/2010

Source: Author's calculations Survey Data 2009/2010 & GUS Special Report 2009

Table 51 shows that three institutions clearly have high scores on multiple international indicators. At the bottom, two institutions are much below all the other surveyed one on the multiple international indicators. In fact it is our survey's highest ranked PHEI that constitute the top group and the survey's lowest ranked PHEIs that constitute the bottom group. It is possible to identify the most and least international institutions on the multiple measures. In between, the other surveyed institutions have mixed profiles, scoring high on some indicators but not others.

5.2.8.6 Other International Activities

The international orientation of the top-ranked PHEIs is not limited to attracting foreign students. Several interviewees emphasize that the top-ranked institutions pay attention to the internationalism of Polish students and faculty members. They do this through various strategies. Polish students have a large spectrum of opportunities for international experiences offered by particular private institutions. First, many top-ranked colleges offer courses taught in foreign languages (mostly English). These are sometimes taught by foreign faculty members. For example, university #B, within just a few years, was able to invite and host 27 faculty members from a California HEI to teach 83 courses in English. In addition to learning English from native-speakers, Polish students were exposed to different methods of teaching and different practical experiences that foreign faculty introduced during their lectures.

Besides diversification of the student body and international exposure for Polish students, interviewees report that the top-ranked privates tend to encourage their faculty members to become more internationally oriented. Again there are several strategies. A common one is funding participation in international conferences. In some cases faculty are asked to teach courses in English.

In addition, interviewee #C emphasizes that his university introduced a so called "zero year" for those foreign students who have problems with English and need additional time to be able to start the regular programs offered by the university. The

same institution offers also an online program in Russian for Ukrainian students⁸⁷ who are interested in getting a degree from that top-ranked Polish PHEI.

Two factors related to internationalism of top-ranked private institutions raise questions in the minds of some interviewees about the rosy picture just sketched. First, there is a possibility that the international orientation of the top-ranked privates is not purely related to quality, as rectors claim, but also to the decreasing population of Polish young adults. Poland is not unique in trying to attract foreign students to offset domestic decline (Levy 2012a) PHEIs often seek innovative ways to compensate, including Of course this dynamic can be seen as to the credit of the engaged PHEIs.

Secondly, interviewee #E, a nationally well-known scholar who teaches in a topranked private institution (#C), criticizes his university for attracting international students only from a certain region in Europe, without providing courses in English for a broader base. Instead the university requires foreign students to learn Polish in order to participate in the programs. Overall, this scholar questions the future of the university in terms of internationalism.

5.2.8.7 Conclusion

Top-ranked PHEIs are mostly similar to the private sector overall in that only a small minority of students are international In that sense the first part of the hypothesis is supported. But nobody expects any but some very exceptional specialized HEI to have a large minority of foreign students. What is much more striking about Polish top-ranked PHEIs is the strong confirmation of the second part of the internationalism hypothesis: differences with the private sector overall are significant. The top-ranked PHEIs have

⁸⁷ According to Stetar (2007) Ukrainian private HEIs have problems with legitimacy due to the state's control and restrictions on private HEIs.

several times the foreign student composition that PHE overall does. Indeed they exceed not only the private but also the public average. These surveyed institutions educate less than 3% in the whole HE system 10% of its international students.

Moreover, taken together the findings from analyzing other indicators-participation in exchange programs, number of international partnerships/accreditations/certifications, and expert testimony-- strongly support the hypothesis that top-ranked Polish PHEIs are internationally oriented. Data for these indicators are not available for either sector as a whole but the findings clearly show that the surveyed institutions as a group place a lot of attention on international orientation. However, we find a striking gap *within* our top-ranked sampled group, as the highest ranked far outdistance their lower ranked counterparts. This reinforces our emerging view that matters like international orientation may be important options for semi-elite institutions but not requisites.

Thus, the findings on internationalism support the umbrella hypothesis that there are major intrasectoral differences within Polish PHE. In contrast, the umbrella hypothesis on intersectoral differences between HE sectors had not been supported in chapter 4's analysis of internationalism. So while support of an intrasectoral hypothesis is not in itself unusual in this study, in this case it comes on subject matter where, quite unusually, the related intersectoral hypothesis had not been supported.

5.3 Conclusion

In order to achieve the main goal of this chapter—determining whether the surveyed topranked Polish HEI differ from the private HE sector along the characteristics proposed for semi-elite institutions, I have evaluated a range of formidable characteristics of the

top-ranked PHEIs and compared them to average PHEIs and in some cases also to average public HEIs. To be in between the two sectoral averages is a necessary but insufficient condition to be semi-elite; this is especially so when in between is in fact very close to the private average. Thus the part (whether explicit or implicit) of each of eight semi-elite hypotheses that suggests that the surveyed PHEIs are in between average private and public HEIs does not constitute a very demanding test. And, indeed we have seen that in almost all cases this part of the hypothesis is clearly supported. Moreover, in those cases in which I stated this part of the hypothesis with a likelihood of great closeness to the private average, this too garners support.

The much more demanding part of each hypothesis refers to how and how much the top-ranked private institutions are distinctive from the private average. We interpret our findings throughout this chapter as supporting—but not fully, and with notable variation--the umbrella hypothesis that top-ranked PHEIs have a set of distinctive "semielite" characteristics. Out of eight specific hypotheses, two are strongly supported by the findings, three are moderately supported, two are supported in only limited ways, and one is basically not supported.

The strongest support for the overarching semi-elite hypothesis comes from two specific hypotheses: Enrollment size and Primary function. For both hypotheses the topranked PHEIs are, to be sure, somewhat similar to the private sector overall but they are at the same time very distinctive from average PHEIs. And they are distinctive in the ways we hypothesized. Although the top-ranked PHEIs are like most privates in that they are smaller than average publics, they have much higher average enrollment than average PHEIs. Some Polish individual top-ranked PHEIs are small institutions but as a group

top-ranked are much larger on average than are typical PHEIs. Similarly, in terms of Primary function, Poland's top-ranked PHEIs follow hypothesized characteristics of semi-elites. The first part of the hypothesis is supported by findings on financial indicators, which show that top-ranked PHEIs do not differ from the private sector in terms of their sources of income and spending patterns. They generate most of their incomes from tuition and fees and spend them almost exclusively on teaching activities. Although data on Ph.D.s, Primary function, and Faculty quality may offer only sporadic or indirect indications that top-ranked PHEIs are distinctively superior to average PHEIs, interviews very much suggest that they are, particularly in the *quality* of their teaching. They confirm that quantitative indicators such as offering the Ph.D. really do mean something about institutional seriousness in research. This may be one of the most notable places in the dissertation where the qualitative evidence makes for a marked distinction from where the numbers alone would take us. Interviews also reveal that the top-ranked PHEIs use special teaching techniques and practices that not only other privates but even perhaps most good public places do not. These findings are consistent with the speculation that semi-elite institutions (Levy 2009b) place priority on good practical teaching or training. Additionally, although the top-ranked PHEIs are in only limited ways involved in research, they are nonetheless well above average PHEIs in this respect.

Further support for the overall semi-elite hypothesis comes from evidence on three additional hypotheses, but here the support is not as strong as for the two hypotheses just discussed. The three additional hypotheses concern Student quality, Faculty quality, and International orientation. In terms of Student quality, my findings

only to a degree show that top-ranked PHEIs have the semi-elite characteristic of a selective student body. The indicators --percent of part/full-time students, number of Ministry scholarship, amount of tuition charged, and testimony of experts all indicate superiority but leave us doubtful about how selective reality is regarding the bulk of enrollment at even top-ranked PHEIs. Scholarship data and testimony may show superiority at the peak without indicating the same for the norm. (The full-time measures speak more to the norm.) Data on entrance requirements—clearly positive data, that is--would be needed to push my evaluation from moderately to strongly supportive of the Student Quality hypothesis.

Similarly, data on Faculty quality moderately support the hypothesis about the semi-elite nature of top-ranked PHEIs. Granted, there are strong limitations within full/part time analysis of employment patterns in Poland due to a lack of data on numbers of 'true part-timers' hired on hourly based contacts by HEIs, and because full-time is a category comparatively loosely used in Poland. But the 'primary work' indicator shows meaningful differences between top-ranked and average PHEIs. Evaluation of the number of faculty hired in primary workplaces clearly illustrates an impressive distinction between the surveyed top-ranked PHEIs and average PHEIs. On the other hand, the testimony of interviewed scholars has revealed polarized opinions about the Faculty quality in the top-ranked PHEIs. Thus, there is some but not overwhelmingly evidence to build a conclusion that top-ranked PHEIs are semi-elite in terms of Faculty quality.

The third issue on which our findings moderately support the overall semi-elite hypothesis is International Orientation. Top-ranked PHEIs are, by the evidence on most

of our indicators, are internationally focused. These indicators are international accreditations and exchange programs. Nonetheless, I would uncomfortable declaring that the International orientation hypothesis is strongly supported. This is partly because even most top-ranked PHEIs have international orientation in only a rather small part of their activities and partly because I do not have data on accreditation/certifications/exchange students/partnerships for the private sector so I cannot compare top-ranked to average PHEIs for these indicators.

For two additional hypotheses--Field subject matter and Concentration of institutional offerings my evidence has supported in only mixed or limited ways the idea that Poland's top-ranked PHEIs are semi-elite. The surveyed PHEIs and the private sector overall cluster in the same fields. Because subfields are a keener indicator than fields and top PHEIs offer so much more than average PHEIs in their leading subfield (social science) of the sector's largest field, one could be tempted to place subject matter into the moderately supported category. But it could be that just a couple of large top-ranked PHEIs account for much of the contrast to average PHEIs and, in any case, the field-level data do not support the subject matter distinctiveness hypothesis. Likewise, the degree of Concentration hypothesis finds only mixed support. The indicators alternately have shown breadth and narrowness in our surveyed group. Breadth because even such a small group covers almost all fields, but narrowness in that it is highly concentrated in just one field and has only limited representation in several.

Finally, on one hypothesis my findings have not lent much support at all for the top-ranked PHEIs being semi-elite. The surveyed institutions simply do not have notably more diverse funding sources than average PHEIs. On the contrary, they have mostly

similar funding sources as the private sector, with only limited additional funding sources. Although they do draw more off a few alternative sources, I label the evidence as not supporting rather than as limited or mixed support.

Whereas my findings on the stated or implicit parts of the hypotheses are strongly or moderately supportive of the proposition that top-ranked Polish PHEIs share much in common with average PHEIs, they are much more mixed—though leaning on balance toward the positive side-- when it comes to the heart of the semi-elite hypothesis: depending upon the specific hypothesized semi-elite characteristic of distinctiveness from typical PHEIs, our evidence shows anywhere from strong support to moderate support to mixed support to lack of support. Thus, as a group top-ranked PHEIs have some of their means very close to the private sector and only a few closer to the public sector. However, in several important respects the top-ranked PHEIs are markedly different from the private sector overall and in ways that mostly support the distinctiveness characteristics at the heart of the overall semi-elite hypothesis. Indeed, five of my eight specific hypotheses about semi-elite characteristics have been either strongly or moderately supported. Some hypothesized semi-elite characteristics may be more valid than others; at least that appears the reality for the Polish case.

Finally, the mixed nature of our findings on semi-elite stems not only from variability across the eight hypotheses, a variability we have explored in depth. They also stem from a variability we have noted much less: the fact that some top-ranked PHEIs have many semi-elite characteristics - but other top-ranked PHEIs do not, and instead appear simply much more similar to typical PHEIs. Because mine has not been a study in depth of nine individual PHEIs, however, I am not in a position to say definitely whether

some of the surveyed PHEIs are in fact true semi-elites institutions and instead rest mostly with my conclusions about the top-ranked institutions as a group.

Chapter 6 : Conclusion

6.1 Synthesis of Findings

This section presents the most important contributions to scholarship and literature of the study with emphasis given to synthesizing major findings. Prior chapters have of course discussed substantive significance. Chapters 1-3 did so prospectively and in the context of prior literature. Chapters 4 and 5 respectively enumerated the significant findings on inter and intrasectoral differences. Now we undertake to bring matters together while not simply repeating individual findings.

Global findings (Levy) have shown that many dynamics of PHE are strong and repeatedly manifest themselves in different systems. The size of systems (small versus large), the economics of systems (strong versus weak), or religious orientations of the systems (secular, Catholic, Islamic) seem not to alter much the development of basic PHE characteristics. Rather the global findings show that in general PHE has comparatively low status, academic legitimacy, academic quality, and research. PHE trails also in employment of full-time teaching staffs, enrollment of full-time students, range of field offerings, presence of expensive fields, and ample funding, facilities, and resources (Levy 1986; Levy 2009a; Levy 2010b). Sometimes these findings are the result of true comparative study of the two sectors but more often, as in this study of Poland, they are the result of studying PHE and comparing results to what is generally thought about or previously known about the public sector. And so, including in this study of Poland, globally public HE is regarded as having comparatively high academic quality, research, scholarly graduate education, full-time teaching staffs, an ample share of fulltime students, an ample range of offerings, fields of study costly to offer, diverse funding

sources, and ample facilities and resources (Levy 1986; Levy 2002; Levy 2010b). These significant differences between private and public sectors have been confirmed in a number of studies on Eastern European countries, as cited in this work.

If Levy means to push the proposition that public and private rules in terms of HE seem to be close to universal, our multi-faceted and detailed analysis of Poland repeatedly encourages the thinking and very rarely contradicts it. Seven of our eight hypotheses on intersectoral distinctiveness were either strongly or moderately confirmed. Taken together, these hypotheses cover a broad swath of the literature's concerns in comparing private to public sectors.

Moreover, these broad substantive findings are produced with more formal, designed, and wide-ranging methodologies than seen in any other national intersectoral case study. Thus the ample findings rest on ample bases. Thus too, the dissertation strongly substantiates the overall hypothesis that differences are major between the private and public sectors in Poland. It repeatedly finds – in great detail for the Polish case – these similarities to other places both in the region (Europe overall and especially Eastern Europe) and globally. In other words, our Polish case not only fits and illustrates but also greatly fleshes out the global findings on differences between the private and the public HE sectors.

This huge private-public distinctiveness echoes that in the global literature's other most detailed intersectoral national studies, including Thailand (Praphamontripong, 2010) and Mexico (Levy, 1986). Indeed, the parallels we identify in Poland assume added significance given how different Poland otherwise is in terms of regional location (Europe versus Asia and Latin America), economic situation (transitional versus

developing), time period (contemporary versus decades earlier), and even private sector share (over 30% in Poland versus roughly 10% and 15% in Thailand and Mexico respectively, at the time they were studied). Despite such differences among the counties, they all show basic intersectoral differences—distinctive ones—with identifiable characteristics. When different researchers operating in very different contexts, with different methodologies, including different indicators, find parallel major distinctiveness, we can claim significant scientific commonality in the substance of the intersectoral findings.

Whereas his own work on PHE has from the outset included intrasectoral dimensions, Levy rather recently has noted the comparative lack of intrasectoral analysis as a weakness of PHE literature; a major step in his own effort to bolster intrasectoral analysis has come with his proposing that there is a "semi-elite" private sector in most private sectors (Levy 2009b; Levy 2010a). This in effect calls for research on the "high end" of PHE. After all, global findings indicate that the vast majority of PHEIs are demand-absorbing, so much so that the modal characteristics of PHE are usually characteristics of these demand-absorbing institutions. Characteristics thus again include comparatively low quality and status, focus on low-cost and high-demand fields (e.g., business administration, law, IT), concentration on teaching and training for certain labor market fields, and so forth. Thus these institutions are very similar to informed overall descriptions of private sectors and are dissimilar to global description of public sector.

But while the typical PHEI undergirds our key intersectoral comparisons, atypical PHEIs may undermine such intersectoral comparisons. It is in this vein that Levy proposes that there is a group of "semi-elite" PHEIs. These may defy the private-public

rules, or at least weaken them. Many implicit research questions are embedded in this suggestion and we have here explored them in Poland. Which typical PHE characteristics are defied by these exceptional institutions, which weakened, and which left intact? Which characteristics of these institutions fall in between the norms of the two sectors and do any even come closer to the public side? Almost by definition top-ranked PHEIs are in between private and public averages, but what discernible characteristics do they have other than just being in between? And to the extent they are in between, where in between? By no means does in between have to mean smack in the middle. In short, the degree and shape of intrasectoral differences in turn affect the degree and shape of intersectoral differences. This is what we find in Poland.

Chapter 4 establishes what sectoral averages are for indicators for the private and public sectors in Poland. Only after having these averages could I analyze any subsector and see where it lies in terms of its means of the private and public averages. Thus chapter 5's focus on a slice of the private sector, the top-ranked institutions, and thus an overarching question: how do the top-ranked PHEIs differ from the rest of the private sector and where do they rest between private and public sectors? Do the top-ranked institutions form a discernible "semi-elite" group? With all that in mind, in chapter 5 I analyzed how the top-ranked PHEIs are in between private and public averages; weighted hypotheses were explored to evaluate where top-ranked PHEIs stand in comparison to the private sector and in many cases also to the public sector.

In this concluding chapter, I synthesize my intrasectoral with my intersectoral findings. Consideration of the dual nature of many of my hypotheses in chapter 5 underscores the linking of my intra with my intersectoral concerns. My findings on the

first parts of these hypotheses show strongly that even top-ranked institutions are often similar to the private sector. On some dimensions, then, findings show that top-ranked -possible semi-elites-- are not in the actual middle between private and public averages. In those instances, notions of intrasectoral difference are weakened while notions of intersectoral difference are reinforced. On other dimensions, however, the top-ranked institutions' mean does not closely approximate the PHE mean and that engages the second part of the two-part hypotheses--the notion that the top-ranked are significantly unlike typical PHE, thus bolstering the idea of intrasectoral differentiation while qualifying findings on intersectoral differentiation. These second parts of those hypotheses are supported only sometimes, however, and supported in other cases they only moderately or limitedly modestly. And my evidence is more supportive of some semi-elite characteristics than others. The theoretical formulation and conceptual validity of semi-elite should be re-evaluated in light of the extensive and in-depth findings on the Polish case and of course will need to await more such case-study findings.

To be meaningfully in between rather than very close to the PHE average is a necessary but not sufficient condition to be semi-elite. Thus to the extent that the "part ones" of hypotheses (top-ranked similar to the private sector) are strongly substantiated and the "part twos" (top-ranked different from the private sector) of hypotheses are not, it seems rather obvious that there are not semi-elite institutions conforming to Levy notions. But where top-ranked are truly in between the two sector averages are they distinct from typical PHE *in the ways Levy postulated*? My eight hypotheses specifically addressed these questions. However, I have only partial support for the statement that the surveyed top-ranked PHEIs are semi-elites as a group. That is because as a group top-

ranked PHEIs has some of its means very close to the private sector and only some of them closer to the public sector. This inconsistency comes with the fact that some topranked PHEIs have many common characteristics of semi-elites but other top-ranked are much more similar to the private sector. Noteworthy is that where the top-ranked institutions do fall meaningfully in the middle between sectoral averages they do so with the hypothesized semi-elite characteristics (e.g., on internationalism and size).

This dissertation has proven more favorable to the concept of distinctiveness than to the concept of isomorphism. On the intersectoral front, this generalization is abundantly evident. Intrasectorally, significant distinctiveness appears between topranked and average PHEIs, though far from consistently. In turn, intrasectoral differences can affect intersectoral differences. The more top-ranked PHEIs are like public HEIs, the more intrasectoral distinctiveness increases within the private sector but distinctiveness diminishes between the sectors. Similarly, though not within the core analysis of the dissertation, public HEIs can also become more similar to PHEIs through, for example, sharp enrollment growth, lax admissions and other standards, and diminishing research in soft fields of study (Kwiek 2011a).

Of course none of the substantive contributions just synthesized denies the study's substantive limitations identified in chapter 1. A prominent deficiency concerns the lack of major integration of findings with the political-economic and social context of post-communist Poland. The research does not tie the presence of PHE to Poland's overall privatization and marketization, or then to political reservations about privatization. Furthermore, the dissertation does not engage directly the policy debates related to PHE in Poland of which many echo in the region and some even globally.

6.2 Significance: Methodological

Having discussed the substantive significance in the synthesis section I move now to analyze the methodological significance and policy implications of this research. In terms of importance of contributions the substantive section is the most essential part of the study because the main purpose of this research is to contribute to scholarship and literature. But the methodological innovations are also significant toward the same ends.

Literature on PHE in Eastern European and in Poland usually is just descriptive and only sporadically makes intrasectoral comparisons—almost never in a systematic way and rarely with more than ad hoc data. Even in the global literature only a few leading works are exceptions to the reality that pieces usually just make ad hoc observations on PHE. Frequently Polish authors refer to valid indicators while describing PHE but do not give much data on them or propose or treat them systematically. Overall, bits and pieces and raw facts may be known by an expert but findings usually are not laid out in an analytical, penetrating, and contextual way. See for example Levy's (2012) assessment of European intersectoral differences region wide. Kwiek's abundant work on Poland repeatedly sees PHE in broader HE, regional, and even global context, as his regional works do for global context. But most work on PHE in individual European countries lacks such context.

Thus this dissertation contributes to the general literature on higher education in several ways. First, it presents eight hypotheses for intersectoral and intrasectoral analyses that are systematically derived from global and theoretical literature on PHE. In all the proliferating literature on PHE and all the findings, nobody has hitherto formulated matters into explicit hypotheses which can be tested in given settings. This research is

pioneering by formulating hypotheses and doing so explicitly, whereas neither the now rather extensive literature on intersectoral differences nor the much less extensive literature on intrasectoral differences has typically gone beyond at most suggesting hypotheses implicitly and vaguely. HE literature has of course has some quite explicit hypotheses, indicators, data, and derived findings, though usually on particular points or limited subject matter. But PHE literature has not until now gone this far and certainly not on such ample terrain as tackled in this dissertation.

This research has developed specific and explicit hypotheses and explored them empirically in the Polish national case. In this application, the research refines indicators, usually statistical indicators, to be able to measure reality on the hypotheses in question. For some hypotheses wholly new indicators are used to test the stated hypotheses for the Polish case. For example, the concept of internationalism among top-ranked PHEIs is evaluated via the number of international accreditation/certifications, exchange students, and international partnerships. In addition, I identify, present, and analyze the most systematic data possible on the indicators. Such processes are only sporadic in the PHE literature. Moreover, more recent and more comprehensive Polish data are used to test the hypotheses than have been used previously in the Polish PHE literature. Although my indicators are overwhelmingly quantitative, I have also explored hypotheses through interviews. Questions were specifically targeted at testing support for the hypotheses. The designed use of in-depth interviews built around pre-set hypotheses seems virtually nonexistent at least outside the US when it comes to PHE scholarship. The integration of such qualitative and quantitative methodologies would then be another original contribution of this study. The interviews have most often corroborated the statistical

analysis, often enriching the understanding of contours or possible explanations, and sometimes providing the best possible alternative where no statistical indicator or data could be employed.

Overall, our claims about the research introducing systematic development of hypotheses, findings indicators for analyzing stated hypotheses, and using data to fuel the indicators, apply to both the intersectoral and intrasectoral thrusts of the research. There is no reason to expect that such methodological innovation is appropriate only for the Polish case. Of course particulars of approach would be adapted for the realities of any case, just as we did here for Poland when looking for example at primary workplace in our exploration of faculty quality. But we hope to have introduced and advanced general ways of studying intersectoral and intrasectoral differences which can be used on other country cases.

Where possible, this research has shown how we can get beyond accepting the findings from simple perspectives or sole indicators. For example, while Concentration of institutional offerings has a core meaning (which each of several indicators measures), the devising of the indicators, and analysis of the data used to measure them, shows that Concentration is also an encompassing multiple concept. Thus, "how concentrated" units are depends on an appropriately multiple set of indicators. On the other hand, to the extent that the concept (Concentration) has a significant core, then "how concentrated" also depends on which we consider to be the best indicator, i.e. the indicator must attuned to the concept. This sort of analytical reflection is applicable to other hypotheses with multiple indicators. Multiple indicators may show that findings say different things, even

somewhat contradictory things, about the hypotheses or they may provide reassuring confirmation. Sometimes they can drive us to refine the hypotheses themselves.

A corollary point is that if the concept is cohesive to the extreme of being unitary, then different findings according to different indicators should be assessed solely by which indicator best reflects the hypothesis' concept. But if the concept is not unitary, one indicator may be more suited to measuring one part or aspect of it (and a hypothesis about it) while another indicator is more suited to measuring another part or aspect. Another caveat then is that we might have an indicator that is better but is 'sourced' by lesser or worse data than the data sourcing an inferior indicator.

Thus it is important to consider what the findings suggest about the power and relevance of the indicators and data, especially for hypotheses for which research uses multiple indicators. Of course there is a logical fallacy in simply saying that the indicators that produce the starkest intra (or inter) sectoral differences are the "best" or "truest" indicators. But there is something suggestive in that and worth pondering and addressing as a matter for future research. It may be worthy to consider looping back from findings to indicators. For example, the findings on International orientation indicate dramatic differences within the top-ranked group for the exchange programs indicator. Some top-ranked PHEIs have many students who participated in exchange programs whereas others have only a few students. If study after study in country after country finds the biggest contrasts among internationalism among HEIs on the exchange program indicator then we would have two logical conclusions, which are not mutually exclusive. One is that the exchange program indicator would then be the best indicator of measuring differences among HEIs in their international orientation. The second

possibility is that this indicator represents the *facet* of internationalism that institutions tend to be strongest on, an activity in which they widely engage.

Even where my indicators have produced rather repetitive findings, as for example on intersectoral differences in research efforts, there are three rationales for the inclusion of the multiple indicators. Two are substantive--cross-checking validation and ample specification of the extent of private-public difference—and a third rationale is methodological: In identifying multiple indicators to test a hypothesis and showing how to use those indicators with national case data, we offer options for future case studies, which may well include situations in which the findings from multiple indicators are far from repetitive.

Just as we qualified our substantive claims by recalling substantive limitations, so we now qualify our claims of methodological advances by recalling methodological limitation discussed in chapter 3. These limitations too pose challenges to generalizing the findings of this research to broader contexts. Due to resource, measurement, and other constraints, the study focuses on only some important intersectoral and intrasectoral characteristics discussed in the literature while others are not examined or translated into observable indicators in this study. Thus, this research does not fully examine all intersectoral and intrasectoral characteristics and their presence or absence in the private and public sectors in Poland.

The research, besides data limitations, presents also some design challenges. The original study included the 20 top-ranked PHEIs as a sample of potential Polish private institutions that could have semi-elite characteristics discussed in the literature. Although the survey was sent to all 20 PHEIs, only nine provided necessary data for inclusion in

our intrasectoral analysis. Thus despite of the efforts not all potential semi-elite institutions responded to the survey.

Furthermore, due to resource and other constraints, the number of interviewees is limited to 10 people (presidents of private colleges, ex-presidents, faculty members, scholars, and government representatives). Although interviewees represent the broad spectrum of HE specialties the focus of interviews was given to intrasectoral differences, thereby limiting in depth discussions about public HEIs.

6.3 Significance: Policy Implications

In contrast to our treatments of substantive and methodologies, our treatment was not designed around topics or questions related to policy implications. Thus, policy is the arena for which we least claim contributions; yet that hardly precludes the research findings from providing valuable information for policy makers. Although the main purpose of this research is scholarship, it has policy implications as well.

Of course what particular moves to make or not make rarely flow in certain or provable fashion from basic research. But the research should be of value in helping policymakers think about policy choices in a more informed way and persuade or be persuaded to adjust certain policies and agendas. Findings of research of this kind should have special value for policymakers due to the rigor of research analyses references to the regional and global literature. The empirical evidence should help in consideration of policy realities and alternatives. Thus despite agreement or disagreement over certain possible policies, this study provides rich and relevant material which can be used during the decision making process. The general points hold for private policymakers, such as leaders and owners of PHEIs, as well as for government and other national policymakers.

Additionally, many aspects of the findings can inform the opinions of the general public, including and in particular choices to be made by students and their families.

My study identifies and analyzes the characteristics of top-ranked PHEIs whereas views to date have rested mostly on ad hoc observations. Evidence presents the nature of the top-ranked PHEIs and the variation among them. It tells interested parties much about strengths and weaknesses in an array of activities; for instance, how and where many are already strong (teaching, computer science, business studies) or not (research) but not really weak in the context of the system, e.g., internationalism. My intrasectoral analysis raises the possibility that a few top-ranked PHEIs may provide teaching on an attractive level even above average publics in this aspect. By seeing the strength of top-ranked PHEIs in certain activities, we are more informed about what government might consider subsidizing. It is neither objectively right nor wrong to subsidize but some might favor subsidizing only activities with a certain student quality level, or covering a certain range of subject matter, etc. Government consideration of merit-based, sector-neutral, funding of research can factor in that, presently at least, even top-ranked PHEIs do little research. While that has negative implications for the prospects of major sums going to PHE, by the same token it means that government can further open competition to PHEIs without risking much revenue. If government cares to promote serious teaching in Polish HE and believes that public universities have sufficient self-motivation when it comes to research, it could consider merit-based, sector-neutral, incentives for innovative teaching programs. If it believes Polish HE should become more internationalized, it should realize that at present the top-ranked PHEIs stand alongside the public HEI leaders.

Similarly, evidence provided in this study could weigh in on deliberations over whether government might take institution-based initiatives. One possibility would be incentives to leverage a few average PHEIs toward the level of the top-ranked PHEIs. Another would be to leverage the laggards among the top-ranked toward the forefront of the group. Targeted funding might be conceived of as helping top-ranked PHEIs to be more truly semi-elite. And our considerable evidence of where top-ranked PHEIs resemble average public HEIs could well provide a basis for consideration of providing capital so that top-ranked PHEIs might be brought further toward the public than the private norm, where that is deemed desirable. Again, our evidence does not say whether any such public policy is "right" but it tells us much about feasibility and targeting as it diagnoses the contours of present reality.

Whether it takes an activity-based or institution-based focus to competitive funding for top-ranked PHEIs, a salient reality affirmed in both our intersectoral and intrasectoral analyses is crucial: PHE, even top-ranked PHE, is basically self-sustaining financially. Thus a classic argument in favor of some public subsidization of private institutions can be invoked here. This is that it can be ultimately less costly for government and public policy to achieve its aims by paying a minority share of the funds into the private sector than by paying the huge majority in the public sector.

At an institutional level, the research findings on intersectoral distinctiveness and on top-ranked PHEIs can inform various relevant institutional decision-makers, such as college presidents and administrators, of what the differences and similarities are between the sectors, between top-ranked and average PHEIs, and among the top-ranked PHEIs. For example, findings on student quality, faculty quality, internationalism, and other

aspects can be especially useful for PHEIs leaders in regard to decisions about recruitment student body composition, employment orientations, international orientations, and other institutional characteristics. Or about how to lobby for public funds or move toward greater academic legitimacy. The knowledge about characteristics of top-ranked PHEIs may help those who have not had similar features to see advantages of such and thus to reevaluate their institutional characteristics to become more similar to their benchmarks. In other words, institutional leaders may, based on the presented research concepts and data, sometimes adapt their own institutional characteristics to match those present in their aspiration institutions. Top-ranked PHEIs can see what other top-ranked PHEIs manage to do that they do not. In contrast, similar knowledge is of importance for PHEI leaders who choose to become more distinctive or innovative from others. Overall, such information can be very beneficial mostly for PHEIs in their further strategic planning which may include reshaping their institutional characteristics so that they can compete in what appears to be an eminently difficult market given Poland's demographics, meaning greatly diminished demand for higher education, a kind of slippage that has been shown elsewhere to fall disproportionally hard on PHE (Kwiek 2011b; Levy 2012b). In general, an array of our findings allows any PHEI to see itself on a spectrum and thus make contextually informed decisions⁸⁸. Such policy decisions will take on new dimensions, sometimes crisis dimensions, as Polish HE enters a period of demographic contraction; pressure on decisions by PHEI leaders may be especially intense.

⁸⁸ To a certain extent, admittedly less, findings provide information that allows public HEIs to see themselves in context when they consider reform, at least if these HEIs have sufficient autonomy to make some of their own decisions, which is indeed the Polish case.

As I developed my indicators for best gauging my hypotheses, I confronted situations in which optimal indicators were rendered impotent because of a lack of data to fuel them. The policy audiences I target with these observations about data include any responsible for the gathering, organization, and distribution of data, be they in government, national academic agencies, or HEIs. I illustrate how additional data would be beneficial in understanding the intersectoral and intrasectoral variations within the HE system. For example, in the Polish case the national database does not provide data on the number of "true part-timers," which prevent comparing the employment patterns in the two sectors. This may be an example on which Poland is unusual but in other instances our identification of data vacuums may well apply beyond Poland. For example, analysis of internationalism could be strengthened by gathering data not only on numbers of international students/graduates, but also as discussed in chapter 5, on international accreditations/certifications, number of visiting scholars/faculty, and number of international partnerships. These data are currently not gathered by the Polish government. Other data would be needed to explore indicators such as graduation rates, retention rates, or faculty productivity which are very frequently used in peer comparisons of HEIs in the US. These data are used in institutional research studies, but presently cannot be employed in Poland.

The GUS database lacks institutional level data for many indicators. Even a special GUS report that includes some institutional level data does not provide financial information. For example, despite my efforts I could not gather information about differences in expenditure per student between top-ranked PHEIs and average PHEIs, an. indicator that might show a big gap between the two groups; the GUS presents data by

sector only but it would help for research to see by institution as well. The institutional data obviously would greatly enrich the possibilities for intrasectoral analyses and would also allow more discriminating intersectoral analyses. Granted, there is a tradeoff with confidentiality, perhaps particularly for PHEIs, particularly on financial data. On the other hand, if and when any PHEIs come forward and seek public money or other recognition and legitimacy, there can be a strong case for transparent presentation of ample data.

Moreover, it is not enough that the government collect more data; government also needs to organize and display it in clear and accessible ways. For example, even where GUS has some institutional level data it proved very challenging to obtain for this research. Additionally, the organization and formatting of data presently limits opportunities for running statistical analyses. For example, the lack of easily accessible data on individual institutions leaves the researcher unable to calculate standard deviations for private and public sectors.

Data collection relevant to PHE is a common problem for the Eastern Europe region and even for the whole of Europe. Thus my data suggestions are relevant beyond just the Polish case. Much more information, more usable information, is needed on European PHEIS.

6.4 Recommendations for Future Study

In looking to future study on related subject matter, we think in part about addressing some of limitations in this study. We have no basis on which to give guidance on matters such as how to study PHE in broader political-economic context. We concentrate here instead on how to extend our innovative approaches into proximate HE

terrain. This terrain includes other national HE systems, other private subsectors, public subsectors, and subject matter of intersectoral and intrasectoral dimensions not reached by our eight hypotheses.

The synthesis of substantive findings section illustrates how this research contributes to understanding differences between private and public sectors in Poland and shows similarities of findings to other places in the region and globally. Likewise, the intrasectoral evidence reflects on similarities and differences between characteristics of Polish top-ranked PHEIs and hypothesized semi-elite institutions. These intersectoral and intrasectoral analyses are based on evaluation of eight hypotheses systematically derived from global and theoretical literature on HE as adapted by my own perspectives on that literature and initial views of the Polish case. In this application, the research develops indicators, usually statistical indicators, some by tweaking extant HE indicators, others by my own initiative, to be able to measure reality on the hypotheses in question. There is very rarely reason to expect that such methodological innovation is appropriate only for the Polish case. *Thus this research introduces and advances general ways of studying both intersectoral and intrasectoral differences, ways which can be employed and adapted to study on other country cases.*

This study has shown significant intrasectoral variation through mapping differences between the top-ranked PHEIs and average PHEIs in Poland. Levy's (2009; 2010) theoretical concepts of PHE type semi-elite have proven to be largely valid for the Polish case even though important deviations appear. Given that this study has focused on the characteristics of one subsector--semi-elite--of PHEIs and that as mentioned in chapter 5 the PHE literature is much more extensive on inter than intrasectoral

differences, further study should incorporate and adapt methodologies used for the this one subsector, to evaluative the most populous subsector in Poland and in most other places regionally and globally—the demand-absorbing subsector. Since demandabsorbing is the great bulk numerically of the Polish PHE sector, we already know, especially from chapter 4, a lot about the demand-absorbing subsector. However, further analyses may evaluate the applicability of Levy's typology to this group of PHEIs for Polish case and beyond. It is possible that there may be variations within this group. Of particular interest is the possible species of "serious demand-absorbing." To date, only three country cases (Thailand, Mexico, Turkey) have studied these institutions but much rides, in scholarship and policy, on distinguishing valuable from "garage" demandabsorbing institutions (Levy 2010a).

Furthermore, Poland resembles most countries of its region in having only a small religious subsector. In Poland, as in Hungary, the Catholic University is not normally counted as PHE and there are not many other religious universities (as we leave aside seminaries). Thus evaluation of religious PHEIs is not a big matter for a Polish and most of Eastern Europe research agenda; however, future studies on other countries would confront significant religious subsectors so, for them, considerable use of our methodologies for intrasectoral analysis could prove warranted.

But whatever impact this dissertation has on the study of other PHE subsectors, it should have important impact on studying the subsector targeted here. Only limited research is dedicated to analyzing "upper end" PHE. The huge exception to that generalization is of course research on U.S. private research universities and elite liberal arts colleges. Yet when observers realize the uniqueness of the U.S. PHE case they risk

stumbling into an exaggerated opposite statement, that the rest of the world's PHE is either low status or religious. This study is the most extensive to date of upper-end PHE outside the US. Roughly half my analysis is about top-ranked PHEIs. The closest counterpart national case is Praphamontripong's study (2010) of Thailand. Levy's 1986 study of Latin America contained extensive intrasectoral PHE analysis and indeed, since demand-absorbing was arguably the least important subsector in Latin America then, he gave major attention to what he then called "elite" PHE, as well as to religious PHE. Other than this, however, there is little more than passing reference to such institutions or very narrow institutional reports with little national and no regional or global contextualization. The limited scholarship on "upper end" PHEI certainly illustrates that much more study is needed before we understand the nature and characteristics of these private institutions. Future studies not only can help to understand better the "upper end" of PHE but also to see if Levy's semi-elite formulation captures that upper end well. Which of his proposed characteristics work and which do not or need revision?

Methodologically, the approach employed in this research has proven suitable in examining institutional diversity among PHEIs with a focus on top-ranked PHEIs. The developed hypotheses, indicators and data selection used for comparison of top-ranked PHEIs and average PHEIs demonstrate how and how much these two groups differ from and overlap one another. Just as such methods can be replicated and adapted for study of other private subsectors, so they can be replicated and adapted for subsectors of the (larger and more important) public sector. Of course, as I note in early chapters, we usually know much more about public than private sectors, and undoubtedly that is true of Poland. However, most of information presented on Polish public HE in the literature

focuses on the whole sector rather than on the differences within the sector. We have little a priori reason to suppose that most methods and indicators used for analyzing subsectors of one sector are inappropriate for analysis inside the sector. Furthermore, the formulated hypotheses for this study on PHE could be a guild for formulation of hypotheses for the public sector, perhaps large versus small public institutions or Warsaw versus non-Warsaw institutions. For example, this research analyzed in depth international orientation of the private top-ranked HEIs based on number of international accreditations/certifications, number of exchange students, and number of international partnerships, but the GUS database does not provide this type of information for even the public sector. The indicators introduced for the private sector could be used in future research to analyze intrasectoral differences in terms of international orientation of public HEIs. Similarly, a student quality indicator-- number and percent of the Ministry Scholarships—could be used in future study as an indicator to evaluate the quality of student body among public HEIs.

We have been clear throughout that our research on intersectoral differences builds on a wider base than our research on intrasectoral differences. Nonetheless, our methodologies even on the former also have value in orienting future research. The dissertation repeatedly finds differences major between private and public sectors in Poland. It repeatedly finds – in great detail for the Polish case – these similarities to other countries in the region and globally. More studies that *formally* compare the sectors on a set of important issues, with similar or other *explicit* hypotheses and indicators and data can bring confirmation or disconfirmation of globally accepted differences between private and public sectors. Poland weighs in very heavily in support of central hypothesis

about intersectoral distinctiveness but would other in-depth national cases in the region and beyond show something very similar?

This study has evaluated intersectoral and intrasectoral differences with for the most part a quite symmetrical set of eight hypotheses in each analysis. So similar subject matter, for example, field subject matter, gets seen in the same work, on the same national case, from both an inter- and intrasectoral perspectives. This greatly helps in seeing how each affects the other. Out intersectoral analysis shows huge private-public differences, but the intrasectoral analysis tempers the extent of the intersectoral differences. Similarly, my intensive intrasectoral analysis shows major differences between top-ranked and average PHEIs, but my intersectoral research allows us to see where and how and how much even top-ranked PHEI are different from average publics, and often are closer to average private than average public. It would be valuable to have more studies that do both – intrasectoral and intersectoral analyses--not only so that both matters are covered but also so that each illuminates the other⁸⁹. To date, however, very few in-depth studies have looked at both intersectoral and intrasectoral dimensions--Levy 1996⁹⁰. There are a few major recent country cases covering both dimensions (Praphamontripong 2010; Duczmal 2006).

In the same spirit of a future research agenda taking our research onto new terrain—national, subsectoral, inter relationship of intersectoral and intrasectoral dimensions—we conclude by identifying how research could move beyond our eight hypotheses. However much we claim progress in the development and testing of

⁸⁹ For example, programs offered by top-ranked PHEIs are influenced by programs offered by public HEIs when the former seek to attract top students that might in the normal flow of things prefer the prestigious (and free) public HEIs.

⁹⁰ But Levy 1996 is on research centers rather than universities.

hypotheses about large intersectoral and intrasectoral concepts, we do not claim that this research has formulated hypotheses for each and every important claim from the literature. We have been restricted due to lack of time, lack of invention of indicators to capture concepts or capture them fully, and lack of data with which to employ otherwise attractive indicators. As noted in discussion of the limitations of this study, it does not touch any aspects of governance, management, or politics that are important in assessing both intersectoral and intrasectoral distinctiveness. Future research should develop hypotheses, indicators, and data analyses suitable to assessing these concerns.

Further enrichment of methodology could include using institutional research literature (from with HE literature) to aid in the study of PHE. A future study may compare HE literature indicators with institutional research indicators in order to select the most accurate measurements for analyzing differences among HEIs. For example, graduation rate is an efficiency measure often used in the institutional research field. Advocates often claim that PHE is more efficient than its public counterparts; a graduate rate indicator could help test this claim⁹¹.

⁹¹ There was no apparent easy way to compare graduation rates for the Polish sectors based on the GUS database because that database does not show the number of students who complete their graduation and receive a degree.

Appendix 1

POLISH TOP-RANKED PRIVATE HIGHER EDUCATION INSTITUTIONS SURVEY FEBRUARY, 2011

This survey of top-ranked private universities includes 15 questions asking for data and characteristics of your University. This study is very important to develop a better understanding of institutions of higher education in Poland. Participation by your University is crucial to the success of the project and I appreciate your efforts to complete the survey. Thank you for your time.

1. What was the number of students studying full-time and part-time (including foreigners) as of 30 XI 2009?

Full-time:

Part-time:

2. How many academic teachers were employed in academic year 2009/2010 in total and how many of them were employed in **the main workplace** in academic year

2009/2010?

Number of academic teachers:

Number of academic teachers employed in the main workplace:

3. How many students have used the school's international exchange programs in academic year 2009/2010?

Number of students:

4. Did your institution have partnerships with foreign higher education institutions in year 2009?

If yes, number of foreign institutions:

No

5. Did your institution have any international certifications or accreditations in year

2009?

If yes, number of certifications:

Number of accreditations:

No

6. Did your institution offer courses or programs which were taught in a language other

than Polish (exclude foreign language courses/programs, for example French) in

the 2009/2010 academic year?

If yes, number of courses:

number of programs:

No

7. Mark all applicable academic levels of programs your institution offered in the

2009/2010 academic year.

Bachelor :

Master :

PhD :

Post-Doctoral

8. What is the total annual cost (in PLN) per student at your institution?

Total Annual Cost per student (in PLN):

- 9. How many departments did your institution have in the 2009/2010 academic year? Number of departments:
- 10. How many majors did your institution actually offer (not just list) in the 2009/2010 academic year?

Number of majors:

11. What was the percent of operating activity revenue generated from following activities in year 2008?

Percent of revenues from teaching activity:

Percent of revenues from research activity:

Percent of revenues from economic activity:

Percent of revenues from the sale of materials and goods:

Percent of revenues from other operating activity revenues

12. What was the percent of expenditure spent on the following activities in year 2009?

Percent of expenditure on teaching activity:

Percent of expenditure on research activity:

Percent of expenditure on economic activity:

13. Did your institution receive support for research activities in year 2009?

From Goverment: Yes____ No___

From International Organizations: Yes____ No___

From Other Sources (not your own sources): Yes___ No___

14. Does your institution have satellite campuses?

If yes, how many

15. What is the approximate FULL tuition (in PLN) for 2010/2011 academic year for a freshmen student?
Level I programs (Bachelor) full-timeLevel I programs (Bachelor) part-timeLevel II programs (Master) full-time-

Level II programs (Master) part-time-

Level III programs (PhD & Post-Doctoral) full-time-

Level III programs (PhD & Post-Doctoral) part-time-

Thank you very much for your participation. Please e-mail this survey to

jm684672@albany.edu

Appendix 2

POLSKIE WYROZNIAJACE SIE PRYWATNE WYZSZE UCZELNIE Kwestionariusz Luty, 2011

Kwestionariusz zawiera 15 pytan na temat danych i charakterystyk Panstwa instytucji. Projekt ten jest bardzo wazny dla lepszego poznania prywantych wyzszych szkol w Polsce. Panstwa uczestnictwo jest bardzo wazne wiec z gory dziekuje za Panstwa pomoc.

1. Jaka liczba studentow studiowala w trybie stacjonarnym i niestacjonarnym (lacznie z cudzoziemcami), stan w dniu 30 XI 2009 r? (pytanie GUS)

Studia stacjonarne:

Studia niestacjonarne:

2. Ilu nauczycieli akademickich bylo zatrudnionych ogolem w Panstwa instytucji i z liczby ogolem ilu nauczycieli akademickich bylo zatrudnionych jako **w podstawowym miejscu pracy** w roku akademickim 2009/2010? (pytanie GUS)

Ogolem liczba nauczycieli akademickich:

Liczba nauczycieli akademickich zatrudnionych jako w podstawowym miejscu pracy:

3. Ilu studentow z Panstwa uczelni wyjechalo na semester studiow zagranicznych w roku akademickim 2009/2010?

Liczba studentow:

4. Czy Panstwa uczelnia wspolpracowala (np. wymiana studentow) z innymi zagranicznymi szkolam wyzszymi w roku 2009?

Jesli Tak, liczba uczelni:

Nie

5. Czy Panstwa instytucja posiadala miedzynarodowe certifikaty lub akredytacje w roku 2009?

Jesli Tak, liczba certifikatow:

liczba akredytacji:

Nie

6. Czy Panstwa instytucja oferowala przedmioty i kierunki w jezyku innym niz Polski

(bez uwzgledniania jezykow obcych) w roku akademickim 2009/2010?

Jesli Tak, liczba przedmiotow:

liczba kierunkow:

Nie

7. Studia ktorego stopnia byly oferowane przez Panstwa instytucje w roku akademickim

2009/2010?

Studia I-stopnia (licencjackie)

Studia II-stopnia (magisterskie)

Studia III-stopnia (doktoranckie)

Studia Podyplomowe

8. Jakie byly koszty jednostkowe ksztalcenia w Panstwa instytucji w roku 2009? (pytanie

GUS)

Koszty jednostkowe ksztalcenia:

9. Ile wydzialow było na Panstwa instutucji w roku akademickim 2009/2010?

Liczba wydzialow:

10. Na ilu kierunkach byly oferowane studia w Panstwa instytucji w roku akademickim 2009/2010?

Liczba kierunkow:

11. Jaki procent przychodow z działalnosci operacyjnej pochodzil z poszczegolnych zrodel w roku 2009? (pytanie GUS)

Procent przychodow z działalnosci dydaktycznej:

Procent przychodow z działalnosci badawczej:

Procent przychodow z wydzielonej działalności gospodarczej:

Procent przychodow ze sprzedazy towarow i materialow:

Procent pozostalych przychodow operacyjnych:

12. Jaki procent kosztow wlasnych zostal przeznaczony w Panstwa Instytucji w roku

2009 na ponizsze rodzaje działalności? (pytanie GUS)

Procent kosztow wlasnych na działalnosc dydaktycza:

Procent kosztow wlasnych na działalnosc badawcza:

Procent kosztow wlasnych na wydzielona działalnosc gospodarcza

13. Czy Panstwa uczelnia otrzymala fundusze na działalnosc badawcza w roku 2008?

Fundusze panstwowe: Tak___ Nie___

Fundusze z organizacji miedzynarodowych: Tak___ Nie___

Fundusze z innych zrodel (wylaczajac fundusze wlasne): Tak____ Nie___

- 14. Czy maja Panstwo wydziały zamiejscowe? (pytanie GUS)
 - Tak Liczba-

Nie

- 15. Jaka jest przyblizona wysokosc czesnego za semestr (w PLN) na rok akademicki
 - 2010/2011 dla osob rozpoczynajacych studia na Panstwa uczelni?

Studia pierwszego stopnia stacjonarne-

Studia pierwszego stopnia niestacjonarne-

Studia drugiego stopnia stacjonarne-

Studia drugiego stopnia niestacjonarne-

Studia trzeciego stopnia stacjonarne-

Studia trzeciego stopnia niestacjonarne -

Bardzo dziekujemy za wypelnienie kwestionariusza.

Prosimy odeslac wypelniony kwestionariusz na adres: jm684672@albany.edu

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