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HIGHER EDUCATION BETWEEN GOVERNMENT POLICY AND FREE MARKET FORCES: THE CASE OF ISRAEL

Abstract. In recent years Israel's system of higher education has undergone a revolutionary transformation, leading to a sharp rise in the number of students, establishment of new degree-granting institutions, and shifts in legislation and policy. All these have changed dramatically, arousing profound public debates centering on one major issue: how to reconcile academic freedom, as manifested in a free academic "market", with the regulation of higher education. This study explores three main processes that occurred within Israel's higher education system since the reform in the early 1990s and attempts to identify their causes. The research findings show that it was the government's decision to carry out a reform, rather than free market forces that led to the considerable rise in the number of applicants for academic studies. However, free market sources were found to affect admission terms to the various departments, guided by trends of demand and supply.

Key words: Public Policy, Higher Education, Israel, free market forces, regulation

JEL classification: A2, I2

Introduction

Israel's system of higher education has undergone an extensive process of development since the state was established. During this time, the number of degree-granting institutions has risen, with a concurrent rise in the number of undergraduate and graduate students¹ (Davidovitch & Iram, 2014).

The agency responsible for promoting this system is the Council for Higher Education (CHE), headed by the Minister of Education, and most of its members are high-ranking higher education professionals. In addition, the CHE operates the Planning and Budgeting Committee (PBC).

In 1993 these agencies, in charge of formulating higher education policy, initiated a reform² that for about a decade led to an extensive transformation of structured opportunities for

¹ For Master's and PhD degrees.

² Until 1993 the law did not allow non-research academic schools, however in that year the Minister of Education, Amnon Rubinstein, decided on a reform in higher education and changed the law. From 1993 to the present dozens of colleges have been established, most offering academic courses of study for Bachelor's and Master's degrees in the same subjects taught at the various universities.

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acquiring an academic education in Israel. As a result of this reform, Israel's system of higher education changed dramatically, and since the early 1990s the universities were joined by many colleges, creating a more extensive and open framework of higher education encompassing a wide range of fields.

The meteoric growth in Israel's higher education had negative impacts on the system as well, with a decrease in the quality of academic instruction and learning, cutbacks in government funding of schools and universities, and a drop in the ratio of students to senior faculty, which had been about 16 students to each senior faculty member in the mid-1990s and dropped to 25 students per senior faculty member in the first decade of the 2000s.

Moreover, the entrance of foreign extensions, the establishment of nine new privately-owned institutions, and the expansion of the number of public colleges led to fierce competition, with a detrimental effect on the quality of both students and faculty. All these had a negative impact on Israel's system of higher education and aroused criticism.

This criticism of the quality of higher education and of the constant budgetary crises (voiced predominantly by the universities) led the government to establish a committee that in 2007 presented its recommendations on improving higher education (Volansky, 2007).

In light of these trends and effects, the current study shall attempt to analyze the justifications underlying regulation processes undertaken within Israeli higher education and to determine whether these intervention processes stemmed from a preplanned and defined government policy or whether they were simply responses to actions and failures of the free market. First, however, we shall present the basic justifications for the regulation processes undertaken towards the activities of the free market.

Fundamental justifications for regulation

The fundamental justifications for regulation processes derive from the nature of the government's activities vis-à-vis the free market. Advocates of government intervention in activities of the free market offer several justifications for regulatory actions:

1. **Maintaining public interests:** The fundamental premise of regularization is that regulation is intended to serve public interests. Public interests include a varied list of needs, interests, and values. Promoting competition is a major interest that regulation seeks to realize. It serves both businesspeople who wish to enter the market and consumers who seek to enjoy the fruits of competition in the form of improved availability, quality, and price of services. Public interest in competition is not limited to its contribution to effectively realizing freedom of expression. Free competition is essential for market growth and efficiency. Some think that competition is the best guarantee for achieving high-quality products and services and can even lead to lower prices.
2. **Maintaining consumer interests:** A major function of the regulator is to protect the interests of service consumers. Consumer interests require protection and fortification, particularly due to the power differential between service providers and the general population. Modern countries offer good conditions for the development of large firms that provide essential services and commodities. The firms, and in this case the academic schools, strive to be profitable, and profitability derives from consumers, i.e., the students. The government acts to protect the interests of consumers versus companies and ensures that consumers receive good value for their money.
3. **Correcting market failures:** This justification is the fundamental common rationale for regulatory intervention. When analyzing the foundations of regulation it is possible to distinguish between market failure in the narrow sense and market failure in the wide

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sense. Market failure in the narrow sense is assessed by strict economic parameters; for example, when a monopoly's market power allows it to operate with no consideration for restrictions of competition, necessitating regulatory intervention. Market failure in the wide sense occurs when an aim that is not necessarily economic, desired for reasons of public interest, would not be attained through free activity of market players and without regulatory intervention, as in the principles of the Marxist theory (Marx, 1867; Marx & Engels, 1948).

Achieving the target of assuring the general population basic higher education services on equal terms (universal service) might appear to justify compelling academic institutions to provide this service to anyone interested even if not profitable for them. Then again, objection to direct government intervention in the free market and rejection of the government's responsibility to compel free market actors to participate in unprofitable economic activity is certainly understandable.

This approach advocates almost complete freedom of action, letting free market forces determine the company's desired scope of activity, based on natural development through supply and demand. The principle of the free market was shaped by the liberal approach in economics (Friedman, 1962; Melamed, 2006), asserting that in business fields where initiative, competition, and flexibility are particularly significant it is advisable to rely primarily on market forces. The competition that will emerge on its own with no government direction will operate independently and regulation should not be used to intervene in the game rules of free economics.

According to this theory market forces, and particularly those of supply and demand, are sufficient in order to adequately regularize the relationship between all suppliers and all consumers, with no need for government intervention. For this reason, the government tends to reduce its intervention in the free market with the intention of encouraging a free economy based on initiatives and competition. This tendency is manifested among other things in the policy of privatization aimed at transferring enterprises and services from the government to private hands. It might also be manifested in relaxing government supervision of service and commodity provision by private entities. Sometimes, however, this reality might be harmful for customer interests and therefore require involved regulatory activity, necessary both in order to create conditions for competition and for its strong establishment and in order to enforce supervision and restriction of those who manage to prevail in the competitive market and accumulate power versus competitors and versus the consumers (Tal & Ivri-Omer, 2009, pp. 30-41).

In the case of higher education, this approach allows the independent development of institutions of higher education both numerically and geographically as determined by supply and demand. A higher demand for academic studies will encourage players in the free market to establish additional academic institutions to meet the increasing demand, and vice versa. A higher demand for academic studies in a certain area of the country (for example, in central Israel), both as a result of the demand for higher education by the local population and as a result of the financial ability of this population to pay for studies, shall see the establishment of institutions of higher education in this area only, while outlying regions will remain bereft of higher education services. This will also be true of admission terms of the various departments, which will be determined by free market consequences, i.e., supply (number of slots in the department) versus demand (number of applicants for the department), completely unrelated to the country's national, social, or economic need for specific professionals. The liberal approach would not allow the government to intervene and create a new and more suitable reality from its perspective from the social, political, or economic respect. Nonetheless, it would let the

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government become involved in improving the reality resulting, as stated, from free market consequences.

Israel's system of higher education has gone through a revolutionary transformation in recent years, recognized by some as a metamorphosis (Gur-Zeev, 2005). The changes enacted in this field involve various aspects of Israel's higher education: a sharp rise in the number of students, the establishment of degree-granting institutions, legislative changes, regularization and policy changes, and changes in how the entire purpose of academic institutions is perceived.

All these have been dramatically transformed, while arousing many acute public debates. The debates center, one way or another, on one major issue: How can academic freedom, manifested in a free academic "market" (in the spirit of the liberal approach), be reconciled with the regulation of higher education (according to the social-egalitarian worldview guided by the theories of Karl Marx)?

The economic vision of the State of Israel, based on social-democratic economic conceptions led by the Mapay party, underwent a considerable shift once the Likud party, with its support of granting free market powers unlimited freedom of action, rose to power in 1977. In addition to the changes in Israel's economic policy, at that time globalization processes also began to accumulate increasing force and influence worldwide. As these processes spread, they brought with them concepts such as competition, commercialization, market forces, and a free market. While higher education was traditionally protected from economic processes within society (Eckel, 2007), as a bastion of free thought and research (Volansky, 2005), today capitalist logic is knocking on its door as well and threatening to affect its standards. This logic has as its essence the sanctification of utilitarianism and relying on an invisible hand to show the way. The call upon academia to open its doors is appearing at a different pace throughout the world. Some have complied and opened their door wide and others only partially (Davidovitch & Iram, 2014).

The contrasting approaches presented above are evident in the higher education policy of the US on one hand and of France on the other. The US has implemented a liberal policy that recognizes academic schooling as a business investment like any other, capable of yielding returns for individuals and for society. This liberal policy combines the principle of transparency with that of competition. In practice, the demand for academic institutions in the United States derives from the reputation formed by these institutions, affected by the salary levels of their graduates on the free market. Institutions that have managed to produce and export successful graduates who have become well integrated in the labor market and attained higher pay levels will be considered more attractive by applicants and will accordingly raise their admission terms and tuition.

In contrast, France has a clear interventionist policy based on the government's view of education and academic schooling as a national goal and cultural value. According to this outlook, affording local and foreign young people access to higher education will help disseminate French culture among the younger generation and among the entire world. For this reason, France encourages higher education by exempting all students from tuition. Furthermore, the government requires institutions of higher education to admit all applicants with no restrictions, and screening and selective processes are only applied after the first year of studies (Gabbay, 2009, p. 241).

But what is happening in Israel? What economic policy is being implemented at present in general and in higher education in particular? The rise to power of the Likud party indeed led to attempts at implementing the classical liberal approach, but in practice it was only partially applied. This resulted first and foremost from the political price that the new ruling party was concerned of paying if it were to implement this policy fully and systematically. At present,

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policy patterns following the neoliberal approach that began to emerge in the world in general and in Israel in particular in the early 1990s are evident. The economic policy of neoliberal regimes utilizes indirect regulatory measures, aimed at creating and encouraging free markets, supporting and promoting their functioning, and helping private players accumulate capital by supporting and connecting them with the global business world and financial network.

Under the neoliberal approaches, one's quality of life is best served by private individual initiatives of skilled individuals who are free to use their skills in a setting characterized by granting strong rights to private ownership, free market, and free trade (Harvey, 2005; Clarke, 2004; Frow, 1999). According to this conception, the government has an important role in shaping and stimulating processes of regulation to ensure private ownership, free trade, and a commercial market, however it must maintain a distance and take care to avoid direct participation in the market and provision of social services. The markets, rather than the government, represent a pure manifestation of the people's will (Frank, 2000). This economic policy has been implemented by Israel's various regulatory authorities since the early 1990s and these authorities became major players in shaping the local economy.

Hence, the purpose of the current study is to examine whether the neoliberal economic outlook has been applied to Israel's higher education as well or whether this field is grounded in a different outlook than Israel's other socioeconomic fields. Is Israel's higher education developing according to the classical liberal approach that permits uncontrollable market forces to shape reality, similar to the US policy? Or is its development following the social-democratic orientation that lets the government intervene and direct the free market, a policy that, as stated, was customary in Israel at first and is currently being implemented in France's system of higher education? In order to assess the nature of Israel's economic policy in the field of higher education we shall attempt to answer three basic questions:

1. Was the dramatic rise in the number of Israel's institutions of higher education the result of increasing demand for academic studies at the time of the reform in 1993, facilitating the establishment of colleges in response to an emerging reality? Or maybe the reform itself, initiated by the government, created the high demand for advanced studies in Israel?
2. Do the admission terms set by each institution for its various departments reflect the real level of prior knowledge and appropriate cognitive abilities (matriculation and psychometric exam) required to succeed in one's studies or do these admission terms reflect free market consequences, i.e., the point of contact between supply and demand?
3. Does the number of students in the various departments of Israel's academic institutions reflect the natural demand for studies in these departments and the independent desire of Israel's young people to acquire a certain profession, or is it perhaps a result of the government's intentional policy to regulate the number of students in each department and at each institution based on its social, political, and economic needs? In other words, does the government intervene in creating demand or supply for a certain department by providing various financial incentives and benefits to applicants and academic institutions (respectively)?

In this paper we shall attempt, as stated, to answer these basic questions and to reach conclusions about the nature of Israel's current policy regarding higher education. The issues studied shall be examined by presenting data on trends of registration to academic institutions, distribution of registrants between the various departments, and information on the government budgeting policy for institutions of higher education. This information shall be analyzed qualitatively with the purpose of reaching conclusions that will enable responses to the research questions presented above.

Development of Israel's system of higher education

As stated, over the last two decades Israel's system of higher education has undergone dramatic changes, manifested among other things in a rapid and substantial rise in the number of students at institutions of higher education. In the 1990s the system was characterized by a particularly rapid increase in the number of students, with the heavy demand for academic studies and the emergence of new institutions of higher education creating new circumstances constituting the point of contact between demand and supply (CHE, 2014). In an attempt to answer the first basic question, whether the development of Israel's higher education is the product of a well-formulated and planned government policy or the result of a post factum government response to circumstances formed by free market forces, we shall analyze data on the demand for academic studies versus the supply of higher education prior to the reform that prompted the emergence of the colleges.

The increase in the number of institutions of higher education in Israel – a preplanned or post factum process

In the late 1980s – early 1990s, Israel had only eight³ universities, with thousands of applicants every year. The question is whether the number of applicants to these institutions increased in time. In other words, was the decision to open additional institutions a result of growing demand for higher education in Israel? In order to provide an answer we shall examine the number of undergraduate applicants to Israeli universities in various time periods, as portrayed in Figure 1.

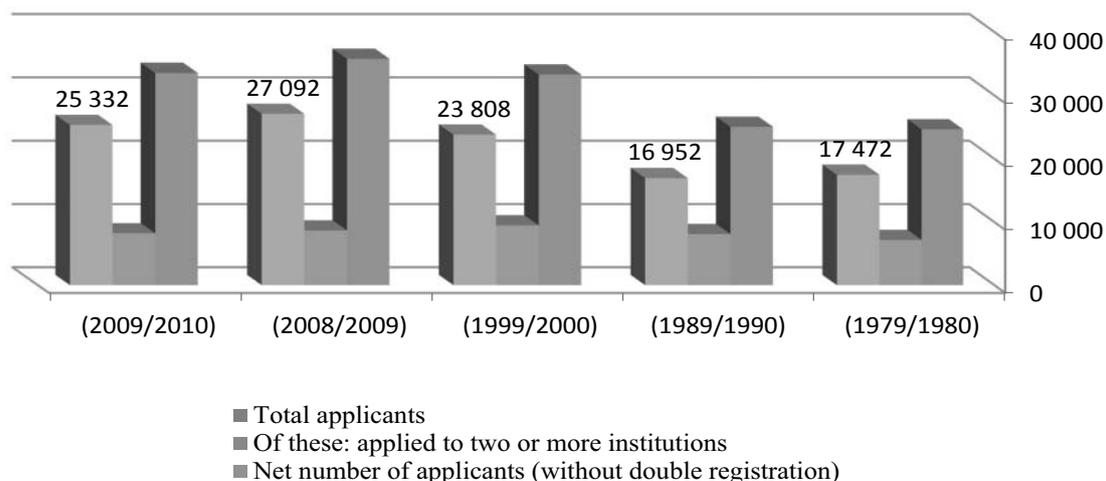


Figure 1: Number of undergraduate applicants to Israeli universities from 1979-2010 (by period)

Source: Central Bureau of Statistics, Table 1.1: Undergraduate applicants for universities.

Figure 1 shows that in periods prior to the higher education reform (1993) there was no substantial rise, if any, in the number of applicants to the eight universities operating in Israel. In the 1979/1980 school year the net number of applicants⁴ was 17,472, and a decade later, in the 1989/1990 school year, the total number had dropped to 16,952. A substantial rise in the number of university applicants was only evident about a decade later, during the reform and

³ Including the Open University.

⁴ Not including those who registered at several universities concurrently.

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once the gates of higher education were opened to new institutions. In contrast, in the post-reform period, the number of university applicants rose significantly to 23,808 in the late 1990s – early 2000s (1999/2000 school year). Although ten years later (2008/2009) the number rose even further to 27,092, this rise then came to a halt and the number of applicants began to drop (25,332), as evident from the data for 2009/2010.

It would indeed not be right to disregard the fact that during the 1990s the country's population expanded considerably as a result of the significant immigration. In fact, between 1990-2002, 857,828 people of employment age immigrated to Israel (not including teenagers and children who were not part of the labor market). Therefore, the considerable rise in the number of applicants for higher education studies could assumedly be attributed to the increase in the population. Nonetheless, in-depth examination of the data shows that the absolute majority of immigrants to the country in this period were from former USSR countries (due to the dissolution of the USSR and newly afforded possibilities of immigration for Jews who immigrated to Israel en masse). This population of immigrants is characterized by a high level of education and liberal professions (engineers, computer experts, doctors, nurses, etc.). Indeed, data of the Central Bureau of Statistics⁵ indicate that of the 857,828 immigrants of employment age who came to Israel in this period, only 233,255 had no profession before coming. This number, spread over 12 years (1990-2002), produces an average of 19 thousand unprofessional immigrants per year, mostly older people with families who rapidly joined the Israeli labor market even at the expense of employment in simple jobs (such as security, cleaning, etc.). Moreover, families of USSR immigrants are characterized by a relatively small number of children. It is also reasonable to assume that only a relatively small part of the unprofessional immigrants were young people who joined Israel's system of higher education at that time. Therefore, it is reasonable to assume that the considerable increase in the number of applicants for academic studies is related to other factors in addition to the population increase.

Furthermore, unemployment in the Israeli economy during 1990-2005 was relatively high, about 10% on average,⁶ and many young people found it hard to find a job or to be admitted for academic studies in order to acquire an education and a career. This fact may have been part of the motivation that urged the government to introduce a reform in higher education in order to increase the supply of schooling for these lost young people.

This leads to the conclusion that the decision to expand the number of institutions of higher education in Israel was unrelated to free market forces, i.e., increased demand for undergraduate studies, which allegedly prompted the government to initiate a reform aimed at increasing the supply of institutions providing higher education services. On the contrary – it was the government's decision to implement the reform that created competition between the new and older institutions (the colleges and the universities, respectively), leading to several changes such as massive marketing by both the new institutions and (although after a certain delay) by the older universities, such as through reducing admission terms for departments where competition was formed between the institutions and which enjoyed a high demand, and more. These changes explain the considerable rise in the number of undergraduate university applicants in the years following initiation of the reform.

In other words, it seems that the government's planned policy for increasing access to higher education among the general population and for the social-professional advancement of young Israelis helped create an increased demand for academic studies in Israel rather than the opposite. A reality in which on one hand the demand for studies is rising both as a result of the

⁵ From data of the Central Bureau of Statistics, Table 4.8.

⁶ From data of the Central Bureau of Statistics.

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increase in the younger population and this population's failure to find jobs in the quirky labor market, while the supply formed in response to this demand is also rising as a result of new institutions of higher education, naturally enhances activities in this area. In other words, free market forces simply reacted to the reality formed by the government and contributed to the rise in demand (as a result of the enhanced supply) and to the lowering of admission thresholds (as a result of the competition formed) but they did not create this reality.

Admission terms to specific departments – derived from the department's academic features or from the demand for its services?

The second basic question examined in the current study seeks, as stated, to explore the relationship (or lack thereof) between admission terms set by each institution for its various departments and the demand for studies in each department. Do admission terms set by institutions for higher education reflect a free market consequence, i.e., the point of contact between supply (the departments) and demand (the number of applicants to these departments), or do they reflect the cognitive ability required of applicants in order to succeed in their studies?

In order to explore this issue, we shall present data on the demand for six selected departments in three different fields: The first field includes physics and mathematics, "exact sciences" taught in the Faculty of Natural Sciences. The second includes economics and law, which shall be termed "logical professions" although subsumed under the Faculty of Social Sciences, and the third field consists of psychology and social work, considered "humanistic professions". Israel's Central Bureau of Statistics publishes annual data on Israeli university and college applicants. Thus, Figure 2 shall present the number of applicants for studies in the six departments analyzed in this study:

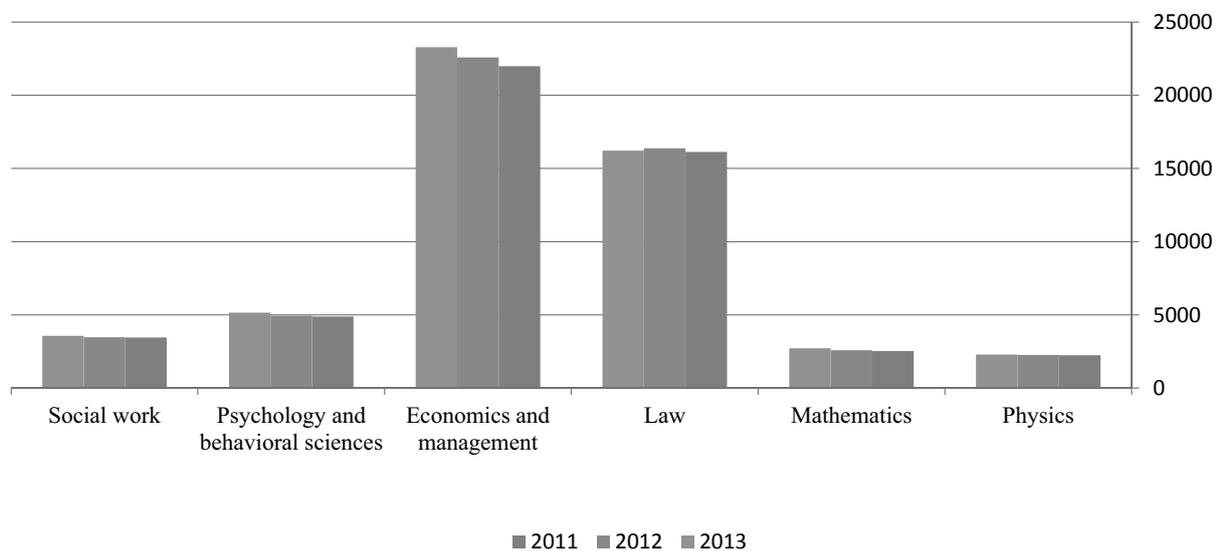


Figure 2: Number of applicants to the various departments during 2011-2013 (Universities and Colleges)

Source: Central Bureau of Statistics, Table 1.18, and publications of the Council for Higher Education in 2012, 2013, and 2014

The data in Figure 2 clearly show that the demand for studies in the exact sciences (physics and mathematics) is considerably lower than the demand for studies of the logical professions (law and economics) and for studies of humanistic professions (psychology and social

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work). This although the former probably require a higher cognitive level, as students must deal with quantitative courses in areas considered difficult. Hence, it would be interesting to examine whether the admission terms at Israeli universities reflect the academic requirements necessary to succeed in these studies or the low demand for them. Table 1 below clarifies this issue.

Table 1: Admission data of the various departments at Israeli universities for the 2013/14 school year

Academic institution	Measure	Physics	Math	Law	Economics	Psychology	Social Work
Tel Aviv University	Coordinated score	640	620	651	620	650	582
Hebrew University	Psychometric score	584	572	716	654	740	618
Ben Gurion University	Quantitative total	600	600	N/A	650	670	645
Haifa University	Psychometric score	500	500	665	660	660	615
Ariel University	Coordinated (combined)	551	590	N/A	580	580	600

Note: Bar Ilan University does not publicize its admission requirements and therefore was not included in the table.

Source: University websites.

Table 1 shows that the terms of admission set by the different Israeli universities are completely incongruent with the strict academic standards required in order to study in specific departments. It would have been reasonable to assume and to expect that admission to studies with strict academic standards, such as physics and mathematics (which require students to cope with quantitative and computational subjects), would require a high admission threshold both in absolute terms and compared to less “difficult” departments (which involve mainly qualitative courses)⁷, however the data in Table 1 refutes this assumption.

Particularly conspicuous are the Hebrew University of Jerusalem and Haifa University where the admission terms for physics and mathematics are considerably lower than those of the four other departments examined in the current study. At Ben Gurion University a similar trend was found, although it is less jarring than at the Hebrew University and Haifa University. At Tel Aviv University and Ariel University no real difference was found in admission terms for the various departments,⁸ a fact that is not compatible with the assumed difference between the high study standards required in the exact sciences and for other subjects.

If so, the question is: What is the source of this incongruity between the various academic and cognitive standards required in order to study the different disciplines and the admission terms set by Israeli universities? Why do the admission requirements for physics and mathematics not reflect the real cognitive skills and capabilities required of a student studying these disciplines? Why are the admission terms for these exact sciences more or less equal (Tel Aviv University and Ariel University) or considerably lower in the extreme case (Hebrew University

⁷ A special case is that of the study program in economics, which combines qualitative and quantitative courses, although the extent of quantitative courses is considerably lower than that required in the exact sciences (physics and mathematics).

⁸ Aside from the Department of Social Work at Tel Aviv University for which the admission requirements were considerably lower than for the rest of the departments examined.

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and Haifa University) than for the other disciplines inspected in this study which, as stated, require a lower cognitive load and analytical skills? The answer is associated with the demand for studies in the various disciplines, as presented above in Figure 2.

Thus, the academic demand for one subject or another is affected by free market forces and is related, among other things, to the student's future earning ability, and it eventually affects admission terms determined by the universities. Hence, it seems that the low demand for physics and mathematics studies moderates the real admission terms necessary to succeed in the exact sciences at all the universities examined in this study. In contrast, the rising demand for law, economics, and psychology studies appears to have caused the universities⁹ to artificially raise their admission terms despite the fact that these strict requirements are not necessarily crucial for applicants' future success in the department. This leads to the conclusion that, unlike the first conclusion concerning the reason for opening many academic institutions in the early 1990s, which indicated as stated that it was the government that prompted these development processes and cancelled the effect of free market forces, here it seems that it is precisely free market forces, manifested in the supply of slots in the various departments versus the demand for studies in these departments, that is the dominant determinant of their admission terms. These free market forces moderate and sometimes even completely neutralize the real admission terms for the various departments that derive from their academic contents and the cognitive level required of their students.

This conclusion leads to the third basic question examined in the current study: Does Israel allow free market forces to determine the demand for higher education? Such a situation can lead, on one hand, to a surplus of certain professionals, potentially resulting in an occupational crisis in those branches of industry, or on the other hand to a lack of certain professionals, with consequent harm to society as a whole.

With the aim of answering these questions, we shall explore factors affecting registration trends to the various departments at Israeli academic institutions and attempt to conclude whether these registration trends reflect the natural demand for these departments and the independent desire of young Israelis to acquire a certain profession, or maybe they are the result of the government's intentional policy to regulate the number of students in each department and at each institution according to its social, political, and economic needs. In other words, we shall try to find evidence of the government's intervention in creating demand or supply for a certain department by providing various financial incentives and benefits to applicants or academic institutions (respectively).

The demand for study disciplines – a result of free market forces or the reflection of an interventionist policy

The higher education policy of the Israeli government is reflected fairly prominently in the PBC policy posted on the CHE website.¹⁰ Examination of the policy indicates several conspicuous features capable of affecting registration trends for the various departments. The first feature involves the PBC's policy of setting maximum subsidized student quotas for each of the funded institutions of higher education. Moreover, the PBC also sets maximum quotas of students in specific disciplines. An institution that exceeds the quota and admits more students than the approved quota will not receive PBC funding for the extra students. Nonetheless, the PBC often allows deviations from specific quotas and agrees to fund extra students in cases of

⁹ Aside from Ariel University where there are no law studies and admission terms for economics and psychology are lower than those of the other universities.

¹⁰ Website of the Council for Higher Education – Planning and Budgeting Committee: http://che.org.il/?page_id=440

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national exigency (for example in the field of nursing). Table 2 presents the number of students approved for budgeting by the PBC in the 2009/10-2013/14 school years for several random representative academic institutions in different categories.

Table 2. Number of budgeted students by institution and degree (Bachelor's and Master's degrees)

	2009/10	2010/11	2011/12	2012/13	2013/14
Universities					
Bar Ilan University	16,100	16,100	16,420	16,544	16,667
Hebrew University	19,170	19,170	19,170	19,170	19,170
Tel Aviv University	23,920	23,920	23,920	23,920	23,920
Art Colleges					
Bezalel	2,069	2,077	2,077	2,077	2,077
Shenkar	2,250	2,317	2,358	2,442	2,547
Engineering Colleges					
ORT Braude	2,549	2,647	2,720	2,831	2,923
Sami Shamoon	3,535	3,626	3,776	3,846	3,956
Holon Technological Institute	3,016	3,143	3,237	3,281	3,351
General Colleges					
Academic College of Emek	3,500	3,705	3,786	3,891	3,978
Yezreel					
Tel Hai	2,649	2,831	2,957	3,015	3,107
Sapir	4,716	4,915	4,990	5,025	5,080
Ruppin	2,181	2,583	2,671	2,718	2,857

Source: PBC budget books for 2009/2010-2013/14: Appendix 5.

Table 2 indicates two conspicuous trends: First of all, it seems that the PBC is not interested in increasing the number of university students, preferring that these institutions focus on developing research, for which they are compensated. Proof of this claim is evident in the PBC policy model, which states explicitly: "...In order to differentiate, according to the policy of the CHE/PBC, between universities charged with both academic instruction on all degree levels (including PhD studies) and promoting basic scientific research and non-university institutions (academic colleges) charged with academic instruction for Bachelor's and Master's degrees only."¹¹ In other words, policy makers in Israel would like universities to focus on research and therefore there is no need to increase the number of their students, while academic colleges aim to focus on academic instruction per se and to enhance its accessibility for the general population and therefore there is need to fund an increase in their number of students. This is evident from the fact that the number of university students funded by the PBC did not rise during the years studied.¹² Then again, the PBC does appear to let the colleges raise their number of students, and accordingly has gradually raised the number of students funded (although at a considerably slow and careful rate). Secondly, the PBC's budgeting policy shows that it wishes to increase the number of engineering students, as it consistently raises the number of students funded at engineering colleges. Notably, PBC policy with regard to art colleges is unclear, as on one hand it did not raise the number of funded students at the Bezalel College but the number of funded students at the Shenkar College does show a gradual rise.

¹¹ Budgeting model of higher education systems, 2013, p. 14.

¹² Aside from a slight increase at Bar Ilan University.

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Another feature emerging from analysis of PBC policy involves the setting of subsidy rates granted to the various institutions for specific disciplines, reflecting the public policy for determining the aggregate number of students in the different disciplines at Israeli institutions of higher education. Admittedly, the total sum necessary to operate studies in various academic disciplines is not uniform and reflects the nature of the courses (operating laboratories and computer labs versus lectures in regular classrooms, small groups of students versus lectures given to large audiences, etc.). The total revenues received by the institution from the various departments are also not uniform and reflect the number of students in the department (a large department will yield higher revenues and vice versa). Therefore, it could be assumed that the tuition charged should reflect the profitability of the department, such that a more profitable department would charge lower tuition while a department that is not profitable would be obliged to charge higher tuition. However, in practice, the tuition charged by the various academic institutions funded by the PBC is uniform and does not reflect the profitability of each department. The government subsidizes students' academic studies and awards the various academic institutions financial compensation in addition to the tuition charged by the institutions.

Hence, the question is whether the subsidies provided by the PBC fully cover the difference between the real cost of instruction at the various departments and the uniform tuition charged. If so – the academic institution should be indifferent to the distribution of its students among the various departments. But perhaps the subsidies are differential and reflect the government's preference for the existence and development of specific fields. In such a case, the academic institution would tend to admit more students to departments for which the PBC provides higher subsidies and reduce the number of students at departments for which subsidies are lower. In order to answer this question, the subsidy rates approved by the PBC for the academic institutions will be presented in Table 3 by the various departments for the years 2010/11 – 2013/14.

Table 3: PBC funding rates of universities from 2010/11 – 2013/14 (in NIS thousands)

	Social sciences	Physical natural sciences	Engineering	Humanities	Law	Psychology	Social work	Business & management
2010/11	17.00	62.90	47.20	30.40	15.10	20.00	19.80	15.20
2011/12	17.30	63.90	47.90	30.80	15.40	20.30	20.10	15.40
2012/13	18.20	67.60	50.40	32.50	16.20	21.40	21.20	16.30
2013/14	18.35	67.75	50.79	32.70	16.33	21.54	21.33	16.38

Source: PBC budget books for 2009/10-2013/14, Appendix 5.

The data in Table 3 clearly indicate a differential budgeting policy, reflecting the government's preference for promoting specific disciplines in which it has a national-social interest. This assertion derives from the considerably lower funding base of students studying law, business and management, social sciences, social work, and psychology (NIS 16.33, 16.38, 18.35, 21.33, and 21.54 thousand per student, respectively), compared to the relatively high funding of the humanities, engineering, and physical natural sciences (NIS 32.70, 50.79, and 67.75 thousand per student, respectively).¹³ This policy is clearly evident in the PBC's new budgeting

¹³ Based on the data for 2013/14.

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model, published in 2012¹⁴ and entitled “Adjustment of the model to national needs”.¹⁵ If so, the CHE seems to identify the failures of the free market and its inability to independently regulate the number of students in the various disciplines in such a way that shall meet society’s needs and therefore attempts to regulate them itself. This, on the one hand, by providing higher financial incentives to academic institutions for admitting more students to professions needed in the local labor market and in Israeli society and, on the other, by setting lower subsidy rates for less essential disciplines due to the large pool of professionals in this field or the low social demand for these professionals (which might lead to an employment crisis and unemployment).

This policy, presented explicitly in CHE documents and indicated by the PBC budgeting model, helps answer the third basic question examined in the current study and reflects a real attempt at government intervention in the number of students at the various institutions and in the various disciplines. Nonetheless, this intervention has a limited effect as it only regulates the supply of studies provided by the academic institutions, which receive differential subsidies for the various disciplines as well as higher PBC incentives for marketing certain departments and for encouraging registration to these departments with the aim of increasing their revenues.

However the PBC’s policy and the policy of the academic institutions have no effect on the demand for the various disciplines, a demand generated by the applicants, since the PBC policy does not include incentives or financial and other benefits (such as scholarships, loans, subsidized tuition, etc.) for students. In the absence of an incentive policy, academic institutions are unable to introduce differential tuition and they must set uniform undifferentiated tuition rates for students in the various departments. Therefore their actions have no effect on the demand for studies, determined by the students themselves.

Discussion and conclusions

This study explores, as stated, three basic questions that help assess Israel’s official policy with regard to higher education. The first basic question examined the reason for opening the gates of higher education as part of the reform enacted in the early 1990s, which facilitated the establishment of academic colleges in addition to the universities. This question examined whether the government reform resulted from the pressures of free market forces, i.e., increased demand for studies by university applicants, who were subjected to particularly selective screening due to capacity limits. The research findings portrayed in Figure 1 show that the demand for academic studies did not rise considerably in the years prior to the reform and therefore the conclusion is that the decision to expand the number of higher education institutions in Israel was not prompted by free market forces. Furthermore, the government’s decision to introduce a reform in higher education was the cause of the considerable increase in the number of applicants for academic studies as it created competition between the new and older institutions (the colleges and the universities, respectively), which were then compelled to adjust to the new circumstances created through aggressive marketing, reducing admission thresholds, etc., and thus contributed to a rising demand for academic studies in Israel.

¹⁴ Budgeting model of the system of higher education for 2012, pp. 79-81.

¹⁵ A representative example of this interventionist policy is the following quote: “As part of the model change process, the PBC pointed out the need to facilitate adjustment of the budgeting to national tasks and goals that the PBC finds it possible to promote as part of the system of higher education. [...] These are socioeconomic needs of Israel [...] needs of the labor market, unique disciplines [...]. The PBC has decided that several adjustments must be made in specific fields: [...] electronics and electrical engineering and computers [...] due to the lack of skilled human resources in the business sector, with an emphasis on hi-tech [...] the greatest need is in the fields of computer engineering and electronics.” (Budgeting Model for the System of Higher Education). Ibid., p. 79.

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This policy has contributed to the present shaky financial state of many higher education institutions in Israel, particularly the veteran universities, some of which are currently in a state of financial collapse, and from the collapse of disciplines that for many years enjoyed increasing unchecked demand and thousands of their graduates are now joining the labor market with no prospect of employment¹⁶. Israel's intended policy of developing higher education, manifested in opening numerous academic institutions, appears to have focused mainly on tactical short-term aspects without taking into account long-term considerations involving the survival chances of those institutions in the tough competitive circumstances created following the reform; without planning for the government's capacity to finance the students of these institutions, inadvertently leading to a state of deficit that would make their survival difficult; without examining the practical need for certain professions that have flourished substantially since the institutions were opened, leading to a virtual bubble with no social justification. This reality shows that free market forces have taken control of Israel's system of higher education.

One good example is law studies, which has been very popular since the mid-1990s. From 1995 to the present the number of lawyers in Israel has multiplied by four!¹⁷ As a result they are finding it very hard to find jobs in the competitive labor market and those who manage to find jobs are forced to make do with lower salaries. Thus, these circumstances, initially formed by planned government policy and later led by free market forces, create many market failures both from a budgetary perspective (for the Ministry of Education and for the institutions of higher education) and from an employment perspective, particularly for graduates of the humanities (Roeh, 2014).

The second basic question examined the determinants of admission terms to the various departments: Do admission terms reflect the real level of prior knowledge and appropriate cognitive ability (matriculation and psychometric scores) necessary to succeed in one's studies or are they a result of free market forces, i.e., the point of contact between supply and demand? In order to answer this question, Figure 2 listed the number of applicants for the various disciplines with their necessary academic level and cognitive requirements, and Table 1 listed the admission terms for these disciplines, in an attempt to uncover the congruence between the cognitive requirements necessary to study a certain profession and the admission terms set by the institution. The table shows no congruence between the strict academic requirements for studying at a specific department and the admission terms set by the various Israeli universities, which do not reflect the actual cognitive skills and abilities required of the students. Comparisons of data on the demand for studies in the various fields (Figure 2) and on admission terms (Table 1) lead to the inevitable conclusion that high-demand fields have stricter admission terms than low-demand fields, unrelated to their nature or to the cognitive requirements of their students in order to succeed in their studies.

Consequently, unlike the first conclusion concerning the reasons for opening numerous academic institutions in the early 1990s, which indicated as stated that it was the government that prompted these development processes in higher education, here the dominant determinant of admission terms appears to be precisely free market forces, as evident in the supply of slots in the various departments versus the demand for studies in these departments. These free market forces moderate and sometimes even completely neutralize the real admission terms for the various departments based on their academic contents and the cognitive level required of their students. The implications of this conclusion are clear: A low-demand field will have

¹⁶ A conspicuous example of this trend is in law studies where, as a result of the unregulated increase in students, the labor market was flooded with attorneys who cannot find jobs (Roeh, 2014)

¹⁷ In 1995 there were 14,480 lawyers in Israel and in 2014 their numbers had reached 56,577! (Roeh, 2014, pp. 2-3s)

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lenient admission terms, leading to lower standard students (who indeed learn all the necessary contents of the study program but at a lower level), with a consequent detrimental effect on the profession. Here too law studies are a good example. The high demand for law studies over many years led to a rise in admission terms, while today (2014), with the employment market saturated with lawyers who cannot find a suitable job, the demand for law studies is dropping¹⁸ and as a result institutions are lowering their admission terms¹⁹ with the aim of maintaining the law studies' "money making scheme", according to the laws of the free market.

The third basic question examined whether registration trends for the various disciplines reflect the natural demand and the independent desire of young Israelis to acquire a certain profession, or whether they are a result of intended government policy to regulate the number of students in each department and at each institution according to its social, political, and economic needs. The research findings presented in Tables 2 and 3 indicate a direct attempt at intervention by the CHE, which acts to regulate registration trends for the various disciplines according to social and economic needs not met by free market forces.

These attempts at regulation involve the educational institutions and therefore operate directly only on the side of supply (although indirectly increasing the supply has an effect on the demand as well). The PBC determines the institutions' approved quota of funded students (Table 2) and thus has an effect on their admission policy in particular and on their total number of students in general. Furthermore, the PBC tries to influence the distribution of students among the various disciplines by allocating differential budgeting to the various disciplines (Table 3) based on ideological considerations (for example, promoting the humanities), national considerations (for example, promoting engineering and the natural sciences), and social-employment considerations (for example, prompting a reduction in the number of law, economics, and social sciences students in order to prevent an occupational crisis in these fields). However as stated, this policy is incapable of affecting the demand for the various disciplines, which is created by the applicants, as the PBC policy does not include incentives and benefits for students.

In conclusion, Israel's policy on higher education as reflected in decisions of the CHE and PBC is not unequivocal. On the one hand it involves attempts to change higher education based on various considerations (economic, social, and ideological), as manifested in the 1993 decision to allow the development of colleges and a significant increase in the number of students, as well as in the budgeting policy that sets quotas for funded students and differential budgeting rates capable of regulating the number of applicants for the various institutions and disciplines. On the other hand, however, it lets free market forces determine admission terms to the various disciplines according to the point of contact between supply and demand, with no direct link to the academic and cognitive requirements necessary to succeed in one's studies, thus possibly impairing the quality of instruction and of the graduates. Moreover, the PBC's interventionist policy, involving promotion of registration to certain disciplines, has no effect on demand rather only on supply, as it does not offer students any incentives to study the preferred disciplines.

This policy does not take into account its long-term effects on Israel's higher education. The reform in the early 1990s indeed led to the rapid development of the system; however it did not include adequate preparation for this rapid development, which was probably not anticipated. The CHE budget was unable to keep up with the development of the institutions and therefore could not provide them with sufficient funds. As a result of this partial budgeting policy some of

¹⁸ In the 2014/15 school year Israel experienced a drop in registrations for law school.

¹⁹ The College of Management enables students to register for law studies based on matriculation scores only, the Haifa University has created a "psychometric bypassing" track, and other institutions are also reducing their admission terms.

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the institutions ended up with a budgetary deficit as well as severe subsistence problems. Moreover, the ability of these institutions to hire new faculty and researchers was limited due to budget shortages, resulting in the brain drain of young researchers to other countries²⁰.

The PBC's limited policy for regulating the number of applicants to Israeli institutions of higher education in general and to the various disciplines in particular allowed free market forces to become the major and even exclusive factor determining the excess or shortage of graduates in the labor market. These gluts and shortages were immediately translated by educational institutions into reduced admission thresholds in less attractive fields and an unrealistic rise in admission terms for high-demand disciplines. Such an unregulated free market had obvious implications for Israeli employment, unemployment, and compensation indices as well. At present, with Israel's higher education system in a dire state of budgetary and academic crisis, the government having insufficient funds to cover its needs and those of the educational institutions in particular, the level of services provided to students is affected, the competition among institutions for faculty and students is diminishing, and it is clear that they have no real chance of effectively competing with other academic institutions around the world (such as top universities in the US and Europe).

For this reason, it is possible to assert that Israel's policy on higher education is compatible with the neoliberal worldview that espouses indirect courses of regulation with the aim of forming and encouraging free markets but avoids full involvement in their formulation. Embracing such a policy in what constitutes a critical sphere for the country's future is hazardous from a social-national and economic respect and might lead to the obliteration of Israel's higher education in the not so distant future, as a result of brain drain, the budgetary constraints of academic institutions, and the diminished quality of higher education. It is already possible to distinguish gradually deepening fissures in the foundations of this important system dedicated to striving for excellence, quality, and service and currently coping with the gradually increasing devaluation of academic degrees (to various degrees), as well as the desertion by young researchers (brain drain), budgetary difficulties and even budgetary collapse of academic institutions, resulting in severe predicaments for the Israeli labor market due to the lack of certain professionals and excessive supply of others. In conclusion, the data presented in this study, attesting that free market forces have taken over Israel's system of higher education and indicating the market failures formed as a result lead to the understanding that it seems that the government, rather than free market forces, should be in charge of this important sphere, so that the next few years will be a time of resuming the high standards and excellence that characterized Israel's higher education until the early 1990s, when it managed to turn out first-rate graduates whose many achievements had a significant effect on quality of life in Israel in particular and on development of the research and applied world in general.

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²⁰ A study published by the Taub Center reveals the sad reality of Israel's system of higher education: Due to the low budgets many researchers prefer to leave (Source: article by Lior Datel, October 7, 2013, "Brain drain in Israel – the highest in the west", The Marker).

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