Economic Concentration in the Start-Up Nation:

Is Privatization at Fault?

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Abstract

In this paper we examine the underlying sources of economic concentration in Israel, which is unusually high for a developed and innovative economy. After a brief review of Israel's economic history since the start of the British Mandate, we describe the level of economic concentration, privatization policy and other public policies that potentially contributed to the creation and sustainment of the concentration problem. We argue that privatization is not likely to be a causal factor, mostly because concentration was present and substantial at least two decades before modern privatization policies were adopted. It is more plausible that other economic policies, such as R&D subsidies, tax breaks for capital investment, export subsidies, tariffs, stringent regulations and barriers to competition played a major role in the emergence and persistence of economic concentration.

1. Introduction

Israel is a world leader in technological innovation. According to the World Economic Forum, Israel ranks1st out of 144 countries in the quality of scientific research institutions, 3rd in innovation, 4th in patent applications per million population, and 6th in company spending on R&D (Schwab (2012)). In 2010, expenditure on R&D in Israel was 4.4% of GDP, the highest amongst OECD countries and more than twice the EU average (OECD (2010)). Israel trails only China in having the most foreign companies traded on the Nasdaq.

One of the most curious aspects of the Israeli economy is that its stellar performance in the area of scientific and technological innovation is accompanied by an unusually high degree of economic concentration. Israel's Herfindahl Index (HHI) well exceeds most other developed countries. The share of market value held by the largest 10 Israeli business groups, or business "families", is 30%. This places Israel in the top 30th percentile of the most concentrated economies in the developed world (Kosenko (2008)).

The correlation between technological innovation and economic concentration in Israel might suggest that monopoly power is more conducive to innovation than a competitive market.[i] While this is likely to be true to some degree because of the prominent role of the military and technological spillovers to the private sector, concentration in the Israeli economy is also a widespread phenomenon. It encompasses industries and sectors that are not much involved in research and development.[ii]

While the academic debate on the optimal market structure for innovation may still be ongoing, the focus of the public discourse in Israel lies elsewhere. It centers almost exclusively on the high cost of living that results from economic concentration. The prevailing populist view is that concentration and the high cost of living are a direct byproduct of faulty privatization policies. This view has an important influence on public policy and serves as a substantial impediment to further privatization and enhanced price competition.

The main contribution of this paper is to point out that economic concentration in Israel is not due to faulty privatization policies. Rather, it is has been engendered by anti-competitive policies partially aimed at fostering technological innovation and sustaining the "Start-up Nation" (Senor and Singer (2009)). The current situation in Israel serves to highlight the unintended consequences and substantial social costs that can accompany any benefits deriving from misguided government-led technology and trade policy.

The rest of this paper is organized as follows. The next section briefly reviews the modern history of the Israeli economy. Section 3 provides background on privatization policies in Israel. Section 4 describes current levels of economic concentration and how they came about. Section 5 discusses the main government policies, other than privatization that are responsible for creating and sustaining the problems associated with economic concentration. The last section summarizes and concludes.

2. A Brief Review of Israeli Economic History

Between 1917 and 1948 the seeds of the pre-state Israeli economy were planted under the shadow of British rule and conflict with the Arabs. The Jewish community combined a strong socialist identity with reliance on private capital for growth. The economy was dominated by agricultural collectives (Kibbutzim and Moshavim), an all-powerful federation of trade and labor unions (the Histadrut) whose headquarters in Tel Aviv was nicknamed the "Kremlin", and a central government that owned all of the land.

After the War of Independence in 1948, the Israeli economy continued to be controlled by the unions and the government. But the focus of the economy began to shift away from agriculture and towards basic industries such as textiles and clothing. Economic policy also changed focus, concentrating mostly on absorbing immigrants, encouraging investment by Jewish entrepreneurs from abroad, and protecting local industries (import substitution).

Despite several attempts to liberalize the economy (especially in the late 1970s), protectionism, union domination, and massive expenditures by the central government (including necessarily high Defense outlays) continued unabated. This inevitably led to an unsustainable public debt burden, monetization, and hyperinflation. By 1985, Israel had no choice but to introduce a radical and comprehensive stabilization program that shocked the economy onto a new trajectory. The need for a modern market economy began to be taken more seriously.

Since 1985, economic liberalization has made important but still limited inroads. Public and private monopolies, as well as vestiges of a soviet style bureaucracy, continue to inhibit the ability of immense levels of human capital to be exploited more widely. Economic concentration and the high cost of living have recently spurred a social justice movement, inspired by protests in Egypt and Spain and similar in spirit to Occupy Wall Street, which is preventing a more energetic pursuit of privatization and enhanced price competition in the Israeli economy.[iii]

3. Privatization in Israel

The Israeli government formally adopted a policy promoting privatization in the late 1970s. However, significant privatizations did not begin until after the stabilization program in 1985. The perceived successes of privatization in the UK under the Thatcher government made it politically easier for many governments around the world, including Israel, to accelerate privatization plans. The UK experience also provided best-practice techniques for effective implementation (see Megginson and Netter (2001)).

Between the years 1986 and 2009, a total of 96 companies were privatized in Israel. Table 1 lists the major privatizations of state-owned enterprises (SOEs) that took place during that period. Privatizations were accomplished in many sectors of the economy, including chemicals, banking, shipping, travel, and telecommunications.

Table 1 here

Methods of privatization in Israel varied. In the case of the banks, the Bank of Israel's policy was to auction core control rather than disperse stocks across the market. This created the possibility for business groups to control major banks without holding a majority of stocks. In the cases of Bezeq Telecom and Israel Chemicals, shares were offered on the stock exchange. Employees of SOEs often received discounted stock options.

From 1991 to 2008, the Israeli government collected over $14 billion in revenue through the privatization of SOEs. This is roughly similar to the amount of revenues raised by China between 1991 and 2003, which yielded $18 billion from the privatization of minority blocks in several hundred large SOEs. This amount of revenue is also comparable to what was raised in the Russian privatization (Guriev and Rachinsky (2005)).

Table 2 lists the revenue by year both in nominal terms and as a proportion of the government’s budget. Revenues grew between 2000 and 2005, reaching a maximum of 3.1% of the state budget in 2005. This is a relatively low percentage. In many countries, privatization revenue accounted for 10% or more of the government budget (Megginson (2005)). Revenues from privatizations in Israel then fell off sharply in 2008, coinciding with the beginning of the global financial crisis.

Table 2 here

Table 3 shows that there are still 92 SOEs operating in Israel, spanning many sectors of the economy. These SOEs include the national electricity and water corporations, three seaports, the railway, the post, and several major companies in the defense industry. In addition, the government owns

approximately 90% of the land, public housing worth an estimated $4.2 billion, and virtually all civilian infrastructure. As of 2012, Israeli SOEs accounted for 2.8% of GDP.[iv]

Table 3 here

In nominal terms, government holdings in SOEs have been estimated to be worth $13.4 billion (Government Comptroller Report (2012)). Table 4 lists the corporations and their estimated values if they were to be privatized. These data suggest that the Israeli government has exploited to date only about half of potential revenues from privatization.

Table 4 here

Public response to privatization efforts has been mixed. There is general satisfaction with reduced prices and better service in some industries, especially telecommunications. According to a 2007 survey by the Israel Democracy Institute, 45% of Israelis support privatization of SOEs and government services in principle, against 33% who oppose. But there is also concern about the effects of privatization on economic concentration, income inequality, and the loss of public control over national resources.

Economic concentration, the influence of “oligarchs” and the consequent high cost of living is the deepest public concern. In 2010, the government addressed the public concern by establishing a committee tasked with increasing competition in the economy. The committee, widely known in the press as the "concentration committee," recommended tightened regulation

on the ability of major business groups to simultaneously own stocks of both financial and non-financial corporations, and to receive government benefits.

The exact reason why there is a public perception that modern privatization policies gave rise to oligarchs in Israel is hard to establish. It is possibly related to the corrupt transfer of assets that characterizes the well-publicized Russian privatization experience (see Black et al. (2000)).

4. Economic Concentration and the Rise of Oligarchs

According to the Bank of Israel (Kosenko (2008)), the 10 largest business groups in Israel control 30% of the total market value of publicly traded companies. As of December 2009, the 16 largest business groups control over 50% of the total market value. In addition, 88% of publicly traded companies are run by a control core. In at least one third of these companies, the control core owns less than 50% of the shares. Moreover, 79% of business groups are characterized by a pyramid-like structure of at least two layers. Business group membership is most common in heavily regulated industries.

According to Israel's Securities Authority, the market share of the largest 10 business groups in Israel is larger than in all other OECD countries examined. This includes other relatively small economies such as Korea, Hong Kong, Belgium, Switzerland, Singapore and Finland. This may have the consequence of rendering the large business groups "too big to fail." According to the Bank of Israel, over 50% of Israel's pension funds' (institutional investors) exposure to stocks is in shares of companies

controlled by the 10 largest business groups (as well as over one third of bond exposure).

The largest business group pyramids control major companies across all sectors of the economy. For example, the IDB Group, run by the Dankner family, owns companies in the banking, insurance, investment, telecommunications, airline, construction, chemicals, and high tech industries. The Israel Corporation, run by the Ofer family, owns companies in the banking, chemicals, shipping, high tech, media and real estate industries.

Key sectors of the economy are also highly concentrated. In the banking sector, a duopoly of the two largest banks share 50% of the market. Together with the next three largest banking groups, five banking groups control 93% of market share. All major banks, as well as 5 of the 6 major financial institutions, are run by a control core. The banking sector is highly regulated and strict licensing requirements have resulted in not a single new bank being established in the country since the 1960s.

In the construction industry, a single provider, Nesher Cement of the IDB group, supplies 85% of the domestic market, while the remaining 15% is imported. Imports are subject to quotas. In the dairy market, 10 suppliers have captured more than 50% of market share. In the food industry in general, government policies dictate target prices, production quotas and high tariffs, making it nearly impossible for SMEs to arise and compete with large corporations.

The severe concentration and control of large swaths of the economy by a small number of business families have little to do with modern privatization

policies followed by Israel since the stabilization program in 1985. The rise of large business groups in Israel has its origins at least two decades earlier.

Reparations from West Germany started to flow into Israel in 1952. The reparations were in return for slave labor, persecution and property stolen from the Jews during the Holocaust. In 1956, the reparations reached 87.5% of state income. Foreign aid also arrived in Israel in the form of economic and military assistance from the US. US assistance became substantial starting in 1971 and now comprises 18-22% of Israel's defense budget. In addition, the French arms embargo, following the six-day war in 1967, prompted Israel to adopt protectionist policies and prioritize the development of independent industries, especially in the defense sector.

The massive foreign inflows from Germany and the US had the effect of reducing the economy's dependence on private investment from abroad and discouraged successive governments from pursuing economic efficiency measures. Coupled with protectionist policies, originally implemented in part for national security reasons, local business groups were able to capture large shares of the domestic market (see Maman (2002)).

In the case of the Israel Corporation, currently one of the largest business groups in the country, there can be little doubt of the government's contribution to the group's rise. Saul Izenberg established the Israel Corporation in 1968. In order to attract Izenberg's capital to Israel following the six-day war, the state granted an exemption from corporate taxes and other substantial benefits for a period of 30 years. The Israel Corporation was also allowed to exclusively buy assets from the government.

The government continues to pursue policies that have the consequence of protecting and subsidizing large business groups. Through measures such as investment encouragement grants and tax breaks, chief scientist grants for research and development, and export subsidies, Israeli governments have channeled billions in taxpayer money to the economy's largest business groups, sustaining concentration and maintaining the high cost of living which is the main focus of recent social protests.

5. The Consequences of Government Technology, Trade and Competition Policy

Research and Development (R&D) Grants

In order to help develop the high tech industry, the government set up a grant program for companies investing in R&D. The grants are under the supervision of the Chief Scientist Office, which is part of the Ministry of Trade, Industry and Employment. In 2009, 573 companies received grants, but 15% of the total amount of funds went to only 10 recipients. This inequality in distribution is part of a long-lasting pattern. In 2007, 2% of recipients received 20% of the funds. In 1998, 24 companies received 39% of the total.

The Chief Scientist Office claims that only 17% of its budget goes to large corporations (with revenues exceeding $100 million). But this figure does not tell the whole story. First, companies with revenues near $100 million are large corporations relative to the size of Israel's economy. Second, Israel's major business groups control a broad range of companies. This means that many grants received by SMEs are in actuality being “transferred” to the oligarchs.[v]

It is also important to note that the R&D grant program requires companies that receive funds to conduct at least 50 percent of their production in Israel or else pay a large fine. In certain markets, this means that independent SMEs must contract out the services of major business groups. For example, in 2002, grant recipients in the semiconductor industry were essentially forced to produce at Israel's only semiconductor factory, owned by the Ofer group.

The Capital Investment Encouragement Law (CIEL)

Under CIEL, the Investment Center, which is part of the Ministry of Trade, Industry and Employment, grants subsidies and tax breaks to companies contributing to exports and employment in the country's periphery. It was CIEL that allowed Izenberg's Israel Corporation to receive an exemption from paying corporate taxes for 30 years, and to exclusively buy assets from the government.

CIEL continues to contribute to economic concentration. During the 1990s, it was found that companies receiving CIEL grants have greater revenue and a larger number of employees than the average firm (Kosenko (2008)). In 2002, 486 companies received tax breaks, but 60% of the total amount was granted to only 10 companies. In 2007, 57% of the total value of tax breaks was given to only 5 companies.

As an example of the relationship between CIEL and the oligarchs, the Ofer group received a grant of $250 million for establishing a semiconductor factory (Tower Semiconductors) in 2000. The group also received substantial grants for their other companies that year, e.g., Dead Sea Factories ($14 million), Oil Refineries ($11 million), and Novatide ($2 million). Note also that

many companies owned by the Ofer and IDB groups, as well as large publicly held companies, receive both R&D and CIEL grants in the same year.

Export Subsidies

Exports account for 40% of Israel's GDP. The Israeli government subsidizes exports through several means. First, it supplies business services to exporters through the Israel Export Institute (50% owned by the government). Second, it offers exporters subsidized insurance through the Israel Foreign Trade Risk Insurance Corporation (100% owned by the government.). Third, it promotes the exports of Israeli diamonds, through the Israel Diamond Institute (25% owned by the government). Fourth, it provides guarantees for exporters through insurance companies and other financial corporations.

The result of government export subsidization is a highly concentrated export market relative to the non-export market. In 2007, 25 companies were responsible for 45% of the value of exported goods and services, excluding diamond exports. Among those 25 companies are 5 firms owned by the Ofer group and 2 owned by IDB. In terms of exporting companies, 2 percent of exporting firms were responsible for 65 percent of the value of exported goods and services. Among these exporting firms is LLD Diamonds, owned by "oligarch" Lev Levaiev.

Monetary policy in Israel can also be considered a form of export subsidy. The Bank of Israel supports exporters by regularly purchasing foreign currency to maintain exchange rates below the market price. By the end of 2012, the Bank of Israel held $75.9 billion in foreign currency. These foreign currency reserves constitute 31.3% of Israel's GDP.

Competition Policy

In addition to R&D grants, tax breaks, and export subsidies, the government has also contributed to economic concentration by holding back competition. In certain sectors, such as banking and insurance, businesses are protected from competition by high entry barriers set up by government regulators. As mentioned earlier, over-regulation in the financial sector has resulted in not a single new bank being established in Israel since the 1960s.

It is important to note that the banking and financial sectors are the core activities of the large business groups. It is well established that these groups use their direct and indirect control of credit to leverage their non-financial enterprises. They can also quite effectively crowd-out or otherwise prevent loans to be made to SMEs and other potential domestic competitors.

Reducing the extent of regulation and encouraging competition has a direct effect on economic concentration and the viability of the large business groups. A prime example is when the government opened up the cellular phone sector to competition in 2011. As a result, prices fell drastically, and so did the profits of the existing cellular phone companies. Reduced profits for cellular phone company Cellcom, one of the major holdings of the IDB group, is one of the main reasons it is currently in negotiations for a haircut with banks and bondholders, and its owner may lose control of the group.

6. Conclusion

In this paper, we have argued that economic concentration in Israel was caused by and is currently sustained by government policies that benefit large

business groups over independent SMEs. Ironically for the “Start-up Nation,” the offending policies include R&D grants. In addition, tax breaks for capital investments, export subsidies, tariffs, stringent regulations and barriers to competition are at fault. Economic concentration and the rise of oligarchs did not result from privatization. It began much before modern privatization practices were put in place.

Privatization has played a central role in the liberalization of the Israeli economy since 1985. The result has been a substantial rise in GDP per capita, life expectancy and other measures of life satisfaction and development. This is in full accordance with the empirical evidence on privatization in both transition and non-transition countries (Meggison and Netter (2001), Brown, Earle and Telegdy (2006)).

Further privatization and the opening of markets to real competition, especially in the banking and financial sectors, will help reduce economic concentration, the problem of the oligarchs, and the high cost of living. This will hopefully be recognized at the political level as the most promising way forward for the Israeli economy, as well as the most expedient way to address the understandable social unrest that economic concentration has engendered.

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Table 1: Major Privatizations: 1986-2009

SOEs	Year of Privatization
Israel Chemicals and 23 subsidiaries	1992
5 major banks (Leumi, Poalim, Discount, Mizrahi and Igud)	1990-2005
IDB Development	2003
Zim International Shipping	2004
El-Al Airlines	2005
Bezeq Telecom	2005
Oil Refineries	2006-2007

Note: The state-owned enterprises (SOEs) listed in the table were either fully or partially-owned by the government.

Table 2: Revenues Raised Through Privatization (Millions of US$):

Year	Revenue	% Government Budget
1991-1994	2,434	
1995	535	
1996	121	
1997	2,397	
1998	1,715	
1999	382	
2000	666	1.2
2001	45	0.1
2002	99	0.2
2003	383	0.6
2004	189	0.3
2005	1,848	3.1
2006	1,551	2.5
2007	1,553	2.2
2008	340	0.4
Total	**14,256**	

Note: Revenue figures are taken from the Government Corporations Authority.

Table 3: Number of SOEs by Industry in 2012

Industry	Number of SOEs
Defense	6
Housing, construction	10
Oil and gas	6
Agriculture	7
Utilities (electricity and water)	5
Unionized retirement savings and investment	12
Transportation and communications	10
Tourism	8
Industry and commerce	8
Arts and culture	7
Other	13
Total	**92**

Note: Data are taken from the Government Corporations Authority.

Table 4: Estimated Value of Government Holdings, 2012

Type of Holding	Name / Description	Worth (billion USD)
SOE	Israel Electricity Corporation*	4.8
SOE	Mekorot – Water Corporation	1.3
SOE	Israel Railway Corporation	1.7
SOE	Israel Sea Ports Corporations	2.7
SOE	Military Industry	1.6
SOE	Post	0.1
SOE	Leumi Bank**	0.3
Other asset	Public housing	4.1
Other asset	Other Real Property	11.0
Other asset	Civil infrastructure	43.9
Other asset	Military equipment	18.7
Other asset	Machines and equipment	2.4
Other asset	Land***	84.7

Note: Data are taken from the Government Comptroller. *Value not including 20.5 billion USD of debt. ** The government owns 6% of the Bank. *** Approximately 90% of the country's land is owned by the government.

[i] See Schumpeter (1942), Arrow (1962) and more recently Schleifer (1998) for analyses of the relationship between market structure and innovation.

[ii] Such as the banking sector, where 5 banking groups control 93% of market share, the food industry, and the auto import industry.

[iii] See Klein (2005) for a guide on more comprehensive reviews of the Israeli economy.

[iv] Since the mid 1980s, SOE activity as a percentage of GDP has decreased from 10 to 5% in industrialized countries, from 11 to 5% in middle-income countries and from 15 to 3% in low-income countries (Sheshinski and Lopez-Calva (1999)).

[v] Between 2006 and 2010, at least 24 companies owned by the Ofer Group received R&D grants. In the framework of grants to companies in technology incubators, an additional 10 firms owned by the Ofer Group received grants. At least 13 companies owned by the Dankner group (IDB) received grants, excluding companies in incubators owned by IDB.

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