

BOOK REVIEW: THE ISRAELI ECONOMY

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Foreword

As a mature fruit deriving from a lifelong distinguished scholarly career, Joseph Zeira has written a highly valuable contribution about Israel's economy. His book is original and multidimensional, and is characterized by an intellectually remarkable effort to explain all crucial aspects of Israel's macroeconomy. In the introduction he states: "My involvement attests to my social and political preferences, but I believe that it does not influence my scientific analysis of the Israeli economy, because I am deeply concerned about the need to separate science from personal views."

I am writing this review in the hope that I will be able to hold myself apart from my admiration of my excellent and didactic Macroeconomics teacher during my MA studies and from my fruitful collaboration with Joseph in writing empirical papers about Israel's economy. I aim at overcoming this challenge.

The Originality and Multidimensionality of Zeira's Book

I have read many books on Israel's economy, and this book is different in many aspects. The first is that it combines simple and nice stories that can be understood by the general public, with rigorous academic analysis that is based on theories like the intertemporal approach of the Balance of Payments (BOP), or on equations that are mainly provided through appendices. A second aspect is that it combines clearly framed analysis of economic issues, like the Philips Curve, with historical events and views that are analyzed from an independent and committed point of view. Another major point that must be stressed about this book is the author's attempt at providing an actual description of events that is based on deep historical roots. Finally, I would like to stress Zeira's unique ability to describe, in an extremely simple style, important contributions to economics that are usually difficult to explain to non-economists.

I would like to start by describing this last point. The following text is taken from page 306: "Income distribution affects important economic outcomes, and the most important among them comes through education affordability. Acquiring education requires an investment from early ages, and this investment can be financed from wealth if there is such, or by loans taken from lending institutions– if the family lacks wealth. But poor parents have difficulties obtaining such loans, since they need to guarantee that their children will repay the principal later on, once they succeed in the labor market. This commitment is problematic, and it constitutes an example of what economists call 'market

failure', which in this case implies that the rich are able to ensure their children's education while the poor cannot, causing a reduction in productivity at the national level." This explanation describes in simple words Zeira's (joint with Oded Galor¹) most influential contribution to Economics throughout his career, which is based on a stylized mathematical model that can be understood by Economics professionals. By using this simple explanation, Zeira succeeds in communicating their contribution to the general public.

Let me now demonstrate the point of a nice story aimed at the general public combined with academic rigor. When explaining the intertemporal approach of the Balance of Payments the author first points to the well-known biblical story of Joseph and Pharaoh's dreams: saving food during the seven good years will help to confront famine during the seven difficult years, at times when the crops suffer from adverse external conditions. The author explains that saving and not consuming in good times allows the economic agent to smooth consumption over time, by using an intertemporal approach that improves his lifetime happiness compared to a situation in which he only enjoys the moment.

This simple description is immediately strengthened by an academic description that is very sharp in terms of how the real world works. The author mentions that a country that wants to consume in the present can over-consume by increasing imports, which will lead to a deficit in the balance of payments. Since this deficit will be denominated in foreign exchange, it will most probably be financed by external agents, who aim at maximizing benefits and will therefore be very cautious. This means that if agents from abroad want to finance the deficit in the current account of the BOP, they actually believe that in the future there will be a surplus, or at least enough growth, that will allow the country to repay the debt even if they have to take new loans in the future. In other words, foreign agents will not be driven by false sentiments or patriotism in this kind of decision.

The author's explanation of the Philips Curve is an example of a framed economic analysis with a comprehensive historical background, including a description of the history of economic thought. The explanation is attached to the story of disinflation in Israel, and more specifically to the gradual nature of the process that took 15 years and was based on a series of declining 'inflation steps'.² A more rapid reduction of inflation would imply confronting the problematic dilemma exposed by the Philips Curve: reducing inflation at the cost of raising unemployment. The author explains that the two inflation steps, at the end of the 1980s and during the 1990s, were achieved through a high interest rate at a time when there were additional reasons for the high unemployment (especially for the second step: due to the wave of immigration from the former USSR in the 1990s that added a huge quantity of potential workers to the supply side; as well as cyclical unemployment in the

¹ Galor and Zeira (1993). In 2013, the Review of Economic Studies included this paper in the list of the eleven most influential papers published in that journal during its 80 years of existence.

² After reducing inflation from 450 percent in 1985 to 20 percent in 1986, there were two inflation steps before achieving price stability. The first step was characterized by an annual inflation rate around 20 percent between 1986 and 1989, and the second step was characterized by an annual inflation rate around 10 percent between 1990 and 1997.

later part of the period due to the difficulties in implementing the Oslo agreements). The high interest rate kept the exchange rate low and helped reduce inflation. This explanation is introduced by showing the historical background of the Philips Curve, first by explaining the situation in the UK in the 1950s and the impact of this concept in the 1960s, and then by describing the contribution of Lucas and the rational expectations theory, which showed that the trade-off is relevant in the short term while nonexistent in the long term.³ In fact, the end of the story is that Israel has succeeded since then in reaching price stability within the range of 1 to 3 percent.

There are two clear issues in the book that combine historical depth in the analysis with actual issues. One of them, present in many parts of the book, is the history of the Arab-Israel conflict, which I will discuss later. The other is the combination of capitalism and government involvement in the economy, which is analyzed not only through actual needs but also through the historical background related to the country's formation. Zeira's analysis shows that in the first decades of the country's existence, it is not possible to differentiate between the country's formation process and politics. The need to tackle in a straightforward way the import of labor and capital in order to enhance production created institutions that were intrinsically related to the party in power in a way that did not clearly delineate between politics and government intervention. The author describes a process in which the Labor Party itself, which governed Israel in the country's first decades, decided to run a mixed economy, with capitalist components that force firms to prove their economic viability over time. While in the early years this mechanism created an economic elite that governed the newly created (private and mixed) firms, in the long run the capitalist economic structure brought about a self-contained model that was the basis for the successful mixed economy that exists in Israel today.

The Cost of the Israel-Palestinian Conflict

At the beginning of the book, the author mentions that the success of the Israeli economic miracle comes at the expense of two issues: the beginning of a Palestinian diaspora as a consequence of historical developments that continue to have an impact today, and the situation of Jewish immigrants from Arab countries, who were settled in the periphery of the newly created country.

The most interesting result related to this issue is Zeira's calculation of the effective cost of the conflict, which is presented in a table on page 129. The approach of combining defense expenses with many additional costs was officially recognized in the 1990s by a committee headed by Liora Meridor, while the Central Bureau of Statistics (CBS) updates the effective cost estimated by this committee from time to time.⁴ Zeira's calculation shows that in order to understand the real expense that the conflict imposes on Israel's economy,

³ The lack of impact in the long term was previously stressed by Milton Friedman (1968).

⁴ The approach of measuring effective defense costs under a broad view was raised by Eitan Berglas (and appeared in the book edited by Ben Porath, 1986).

we must abandon the commonly used approach of quoting only the defense expenditure as a percent of GDP (which today is around 6 percent). In fact, there are many expenses related to the conflict that should be considered in the cost estimation: the alternative GDP cost of the soldiers, the alternative cost of land, human lives lost, expenditure on civilian defense infrastructure, emergency stocks, and other items. According to the author's calculation the actual number becomes 15.2 percent of GDP, which is remarkably high.

Human Capital

The attempt to estimate the contribution of human capital to GDP per worker is very remarkable since it contains one of the crucial issues of the Israeli growth process. Zeira's analysis is based on a well-established approach that combines microeconomic evidence on the contribution of human capital at different stages according to years of schooling, which makes it possible to produce empirical evidence of this contribution.⁵ According to his calculation, which includes the impact of human capital of immigrants, the impact is close to 40 percent, which is slightly higher than estimates for other countries.

This calculation stresses the importance of a continuous updating process that I hope will continue to be implemented. In the future it will be important to include new findings in the literature that look at the quality of education (beyond years of schooling)⁶ and a clean estimation of causality between education and income.

Messages for Future Researchers

The author is particularly concerned with addressing two of the most important issues regarding the Israeli economy: the explanation of growth and the explanation of the high inequality relative to the other OECD countries. While according to the author the latter issue is related to the former, and also to the Israeli-Palestinian conflict, the analysis of the first issue constitutes a challenge for future researchers.

The author carefully explains why Israel succeeded in growing quickly until 1973 and maintaining persistent growth since then. During the first period the main growth engine was productivity, which slowed remarkably during the second period. The particular aspect of the Israeli story that allowed growth at a time when other developing economies were stalled was the ability to obtain finance through Jewish solidarity from abroad and from immigrants' sources, a pattern that differs from the experience in other developing countries at that time.

The main puzzle that remains to be answered by future researchers is the low level of capital that in theory should boost the level of investment, but in practice does not. While

⁵ These calculations have been confirmed by other updated analyses like the one by Argov (2018) that is published in this issue.

⁶ An indicator of quality of education is published in the PIAAC Survey by the OECD, which shows that adults' cognitive abilities in Israel are lower than the OECD average. For a study that explicitly includes the quality of education as an explanatory variable, see Hanushek and Woessmann (2012).

the author suggests that a possible reason is the uncertain security situation, the issue of a low capital level is mentioned by the author as one of the most interesting puzzles to be solved by researchers in the future.

Real Life vs. Theory

One famous anonymous phrase states: "In theory, theory and practice should coincide; in practice, they don't." Some of the issues described in the book are characterized by a mutual interaction between theoretical and empirical considerations. The experience I acquired through my work at the Bank of Israel allowed me to view these issues from up close, making me reconsider some of the theoretical views that I held.

Two examples of this kind of issue that appear in Chapter 7 of the book are related to the banking supervision function vis-a-vis banking sector competition, and to central bank intervention in the foreign exchange market. These issues are analyzed in the book based on the author's description of the topic. However, it is important to keep in mind that economics is a social science, and as such there are topics in which it is difficult to provide a definitive view of the issue. Chief among these topics are the weights that should be given to theoretical and empirical considerations, and in my opinion analyzing them requires caution, particularly when giving a high weight to theoretical aspects that sometimes do not take all the relevant issues related to the real life situation into consideration. In such cases, it is appropriate to show a balanced picture, by showing the pros and cons that are related to the issue, as opposed to a definitive judgement that does not show both sides of the coin.

Concerning the issue of banking supervision, the author points out that there are contradictory goals between supervision aimed at attaining stability and competition in the banking sector. In real life it seems difficult to find a sterilized formula that allows attaining both goals while avoiding any conflict between them. In particular, supervision of a high-standard requires establishing clear norms, which in most cases are perceived by consumers as constraints to their activity. In this respect, there is a well-known issue related to the questions of who should be in charge of the supervision, and how independent the supervisor should be. If the ultimate responsibility for supervision norms relies on the decision of an elected politician, there is a risk that his/her decisions may be influenced by the fear of losing the consumer's vote in the next election. Such fear may lead the politician to avoid making the right supervision decisions in the short term, especially in cases where the decision may harm the probability of being re-elected.

An excellent example of contradictory goals is related to the enforcement of macroprudential policy provisions. In this respect, I would like to mention a dilemma that was recently described to me by Bank of Israel Governor Dr. Karnit Flug.⁷ In a conference at the Bank of International Settlements (BIS) there was a discussion of who should have the mandate to implement macroprudential policy: should it be implemented by central

⁷ I am thankful to Dr. Flug for sharing this issue with me.

bankers or by the government through publicly elected officials? The evidence suggests that if the mandate lies with the government, there might be an "inaction bias": elected agents tend to avoid taking unpopular actions since they hurt potential re-election chances in the short term. Thus, they will not decide on such steps ("take the punchbowl while the party is on") even though they would prove to be beneficial in the long run. However, central bankers, who are not elected by the public, will be more likely to take actions that are not popular in the short term but will be more in line with the public's long-term interest.

In Israel, the Banking Supervision Department was able to take several such actions as a consequence of the financial crisis and the risks related to the boom in housing prices. Examples include increasing the capital provision for housing loans above NIS 800,000 with high loan-to-value (LTV) ratios; limiting the share of variable interest rate loans to one-third (a step that protects borrowers from a future increase in interest rates); limiting LTV to 75% for first-time buyers, 50% for investors and 70% for upgrading homes; raising risk weights for capital adequacy requirements for mortgages with an LTV higher than 45%; limiting the loan period for mortgages to 30 years; and an additional (tier one) capital requirement equal to 1% of the total outstanding credit portfolio. All of these measures protect individuals and banks from specific risks that are relevant to both, but they are also intended to avoid potential contagion that may be related to the incapacity of a financial institution to deal with insolvency issues. This potential problem can be translated into difficulties in the housing market, and can by itself generate a freeze in the market, which may aggravate financial problems. The externality related to contagion/housing market damage will not be internalized by individuals, and will be taken into account only by a supervisory institution.

In terms of foreign exchange intervention, while this issue is controversial, it is also well-known that many central banks intervene in the foreign exchange market due to the academically proven short-term impact of the intervention.⁸ The Bank of Israel has intervened in the foreign exchange market many times in the past, with the previous most prominent episode being the massive intervention in the late 1990s. Today more than 40 countries around the world, including Australia, Canada, Denmark, New Zealand, Norway and Switzerland among others, intervene in the foreign exchange market and some of them have substantial amounts of reserves—much higher than the level in Israel, which have remained quite constant at around 32 percent of GDP in recent years. A worldwide picture of foreign exchange reserves (excluding gold) shows that between 2003 and 2011 (including the global crisis period) there was a huge increase in the reserves of both developing and advanced economies. Both held similar amounts, and their total foreign exchange reserves amounted to 120 percent of US GDP. According to Ilzetzki, Reinhart

⁸ See Caspi, Friedman and Ribon (2018). As they state in their paper, it is possible to document the short-term impact (measured by hours or days), while it is more difficult to quantify the effect in the medium term (measured by months).

and Rogoff (2017), this huge increase in reserves reflects the countries' need to deal with increasing capital mobility in a world in which a high appreciation that is not consistent with the fundamentals may disrupt the development of export capacities of new firms. In addition, countries hold reserves as a means to cope with crises, which in most cases are difficult to predict. The pros of intervention become clear in scenarios in which there are unusual macroeconomic imbalances—like in the period following the Global Financial Crisis of 2008/2009.⁹ During these periods, intervention prevents situations that are not consistent with the fundamentals of the economy and that can be disruptive.¹⁰

The intervention issue is described in Chapter 7 of the book as one in which the Bank of Israel assumes a cost, but there is no comment on alternative ways that the Bank of Israel copes with this cost. Moreover, the exposition does not elaborate on the positive aspects of the intervention, which include maintaining the level of exchange rate in the short term so as to cope with well-known macroeconomic illnesses like the "natural resources curse" or the "beggar thy neighbor" dilemma—especially in times of crises. While Ilzetski, Reinhart and Rogoff (2017)'s argument of justifying interventions to confront a situation of completely free capital flows does not justify foreign exchange intervention in the long term, it does provide short-term justification.

These factors make clear that a more ample discussion is needed in order to analyze this interesting real-life policy dilemma.

Final Remarks

Joseph Zeira has written a thorough analysis of Israel's economy that covers the most salient macroeconomic aspects. There is no doubt that this book will become a must-read for students and academic analysts examining Israel's economy.

⁹ See Ilzetski, Reinhart and Rogoff (2017).

¹⁰ In fact at the lowest point the NIS/US exchange rate reached 3.2.

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