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## Spain and Israel: are they rivals or complementary?

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### Theme

At the two Western and Eastern geographic extremes of the Mediterranean basin, Spain and Israel –both OECD member countries– have been developing over the past three decades in totally different directions. Spain is increasingly looking North towards the EU but also towards Latin America, while Israel is actively developing its relations with emerging economies such as India and China and strengthening ever more its relations with the US. Could it be that the two countries are ignoring each other and missing out on potential complementarities?

### Summary

Before Spain's accession to the European Community (EC), the latter considered Israel and Spain in tandem in the context of a Global Mediterranean Policy, as they both represented semi-industrialised economies in the same league. The demographic and economic structures of the two countries have diverged since then, offering clear prospects of fruitful cooperation, especially in the fields of energy and technology.

### Analysis<sup>1</sup>

Why is this subject conceptually of interest and why is it topical?

It is of analytical interest because both microeconomic theory and the theory of economic integration make ample use of the concept of rivalry (substitutability) and complementarity. Basic economics show the importance of the distinction between substitutes and complementary goods, as observed by the Classics and Neo-classics more than a century ago. For instance, a rise in demand for a given good generates a rise in demand for its complement, while the reverse happens if it is a substitute. But closer in time, regarding rival and complementary economies, at the end of the 1950s James Meade –a Nobel prize in Economics– proposed important criteria to gauge *a priori* whether a particular integration scheme between any two countries could lead to net trade diversion or net trade creation, and one of the criteria was rivalry and complementarity. He predicted that integration between two rival economies (say the US and the EU) would likely lead to net trade creation because integration was likely to allow redeployment over the entire integration area of scarce resources on a more rational basis (in passing, a likely effect of the TTIP that was being negotiated until recently), whereas integration between Australia and Japan, two complementary economies, would lead to net trade diversion. Clearly, after a Free Trade Area or a Customs Union

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were to be agreed upon between these two countries, Australia would start importing from Japan goods previously manufactured, eg, in South Korea (because of the new discrimination in favour of the now preferred Japanese goods), rather than redeploy its own resources, since Australia does not have a manufacturing industry to redeploy. South Korea, being a rival economy to Japan (and not to Australia), would protest to Australia for having preferred Japan as a privileged trade partner (and be envious of Japanese exporters).

The subject is topical because among Mediterranean developed countries Spain and Israel are said to share many economic similarities and hence are in some sense rival, not complementary, economies. This opinion was and is still shared by those underlining geo-economic factors such as both countries being located at the same geographic latitude and having a semi-arid climate dominating most of their territory. Moreover, they are both Mediterranean coastal states at similar distances from Central Europe –eg, from Austria, Germany and Poland–. They both border the Arab world.

In terms of primary resources, the weather, land and vegetation result in a Mediterranean agriculture. Coal and water are scarce (particularly compared with Central and Eastern Europe), as is crude oil. Important discoveries of gas by Israel have substantially altered the Israeli energy balance. Note that both Spain and Israel are very rich in solar energy, a renewable energy resource. Environmental risks of maritime origin are similar, as large parts of their respective coasts share the same sea. Both countries suffer from the relative salinity of their soil and from seasonal forest fires. Also, because Spain and Israel are intensively exploiting their non-business tourism potential (be it for leisure, cultural or religious reasons), both are subject to its seasonality.

Another commonality is that Spain and Israel have Europe as their main trading partner and they had until 1986 similar contractual relations with the EU. Until that year Spain and Israel were considered by the European Community (EC) as Mediterranean partners in the so-called Global Mediterranean Policy (GMP). It is commonly accepted that Europe has had and still has a strong influence on both countries in shaping demand patterns. And distance in international trade still plays a substantial role for three types of products: bulk goods (eg, construction materials and furniture); perishable goods (eg, flowers, fresh fruit and vegetables); and distance-sensitive goods and services (most of them –eg, textiles in fast and short business models, intermediary products based on just-in-time logistics, medical services, tourism and engineering). Not surprisingly, all these goods and services have been present in the export baskets of both countries for a long time. Medical and long-term tourism feature prominently in their exports of services (eg, Eilat and the Canary Islands compete against each other in the winter and retirees settle on the Mediterranean coasts of both countries).

Note that their similar distance to poor Sub-Saharan African countries (SSA) is also important in economic terms as it allows distance-sensitive services to be supplied from Israel or Spain alternatively. For instance, both Israel and Spain have construction companies working in SSA. Israel cannot yet be present in North Africa as Spain is, but should there be peace between Israel and the Arab world, both Spain and Israel could compete in the Maghreb, Libya and Egypt in certain agricultural markets, inward medical tourism, fertilisers, solar energy and so on.

In a nutshell, these circumstances clearly spelled out the case for arguing for a long time that both economies shared similar production and demand structures.

But is that so? Might this story have now been overtaken by events?

### The changing degree of overlap of the two economies

It was the decision taken by the EC-6 (under pressure from France) to have a GMP with Mediterranean Non-Member Countries (MNMCS) in 1972 that led to conflating Spain and Israel in the same class of countries. The EC thus gave preferential treatment, commercially speaking, at the time to certain MNMCS, including Spain and Israel; both were then considered to have similar economic structures by the EC authorities in Brussels. Hence, agricultural and manufactures originating in the two countries were treated in the same way.

Subsequently, Spain became a full member of the EU in 1986 and started benefitting, among others, from the Common Agricultural Policy. This caused a net trade diversion in Spain's favour and against Israel as far as food and other agricultural products were concerned. Light industry products (food processing, toys and clothing) were also in the same case. Already at that time, the author of this paper argued that Israel had not much to fear in the long run and that the countries that should be far more worried were Morocco, Tunisia and Egypt (which at that point seemed much less alarmed than Israel). Interestingly, the Spanish Foreign Ministry was actually worried by the effect of its membership for its Maghreb neighbours. But returning to Israel, the situation was aggravated somewhat when in 1992 the Single Market, including Spain and not Israel, was completed (eg, EU food standards and essential requirements were tailored according to the needs of Spanish producers, not Israeli ones, as Israel was not at the negotiating table).

But, over time, other resources in the two countries have been and are being exploited more intensively than up to the 1980s; and these resources are idiosyncratic to each country and quite different and dissimilar.

Analytically, the factors' proportion theory of international trade, devised in the 1930s, helps us to understand the composition and direction of exports of a specific country as compared with the rest. If two countries export the same products (goods and services) to the same countries, they can thus be considered similar or rivals. So, according to this theory, on what does the similarity hinge? On having similar relative factor endowments, using similar technologies and facing similar relative consumption patterns at home and in their principal export markets. For this theory, still one of the most used and useful to predict trade patterns, two countries are similar independently of their relative economic size.

This has more recently been said to be erroneous, as it overlooks the fact that there is a type of goods and services whose likelihood of being exportable depends on the absolute size of the domestic market, namely goods for which economies of scale and mass production play a significant role. Even with globalisation, there is a so-called 'home

country bias'. All other things being equal it is still easier to sell in the domestic market than to try to sell the product abroad, even in the case of the EU Single Market. Overseas importers using the same currency and respecting the same regulations still have the obstacle of using different languages or more simply of insufficient cross-border roads and bridges along their frontiers.<sup>2</sup>

As regards absolute economic, demographic and market sizes, for instance, Spain and Israel are in altogether different leagues. Spain, with a population of 46 million, is an economy in the G-20; Israel is not. This also means that Spain was probably able to export cars after acquiring experience in the 1960s in its huge local market, allowing mass production and decreasing costs, after which it became feasible to start exporting these goods abroad. Israel tried to do the same with cars but failed miserably because its local market was so small.

Leaving aside products sensitive to absolute market size, it is interesting to focus on the theory of factors' proportion and ask, first, if Spain and Israel have been facing similar consumption patterns at home and in their principal partners. The answer is broadly yes, insofar as both countries have until recently been concentrating their exports on developed-country markets, basically the EU and the US. Of course, the exception is defence industries where, very early on, already in the 1960s, Israel adopted countertrade agreements with the US whereby it would make set-offs to pay for part of its arms procurements from the US (eg, electro-optical equipment), long before the present boom in high-tech exports to the US market. Another typical exception to the rule was Israeli exports of kosher food products to cater for the needs of orthodox communities in the US, Canada and the UK. But, basically and for a long period, Israel and Spain were using the same medium-range, standardised technologies in the production of goods and services (such as textiles and clothing, toys, chemical products, fruit and vegetables). True enough, the use of sprinklers and growing vegetables under plastic in agriculture was invented and/or initiated in Israel but imitated by Spain not much later on. So discussing the similarities and non-similarities of Spain and Israel essentially boils down to comparing relative factor endowments over time.

Israel has been exploiting its huge relative abundant human capital endowment, and Spain has been exploiting since early on the access of its people to the European labour markets –already during the Franco regime and then upon entry to the EU–; but Spain has also used its huge potential for developing intra-industry trade based on economies of scale and diversification and being part of international value chains (eg, in the car industry). Israel, on the other hand, has been excluded from this because of the 'invisible boycott'. Manufacturing multinationals have been reluctant to settle in Israel for fear of jeopardising their business in the Muslim world (a fear probably grossly overrated).

Another example of Spain having a tremendous advantage over Israel is that it possesses a world language, Spanish, which allows Spanish investors a clear lead in all Latin America over other OECD countries, including Israel. Contrary to what is frequently said in Israel, namely that language and culture are no longer important for trade and

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<sup>2</sup> It is said that trade between Oregon and its other neighbouring US states is much greater than with next-door British Columbia in Canada, thus reflecting a 'home country bias'.

FDI as what is important is knowledge of English and Israelis have a far better average level Southern Europeans, this seems unlikely. The gap between Spain and Israel is widening because the latter's citizens are becoming increasingly lacking in knowledge of foreign languages other than English (and except Russian) compared to before the 1970s (when one could hear German, French and Spanish in Israeli marketplaces).

### A widening gap between the two economies

The argument here is that the economic structures of the two countries have been diverging over time. Israel has developed its high-tech industry focusing on defence, telecommunication and Internet products; Spain has specialised first in standard, then in medium technology manufacturing products, mass inward tourism and exporting financial, educational and construction services massively to Latin America. Also, the direction of exports of the two countries has increasingly diverged, with Israel exporting increasingly to the US, India and China, and Spain focusing on the EU (which has a market share of more than 60% of total exports) but also on Latin America and the Maghreb, where Israel is absent.

FDI in both countries has followed the pattern indicated for trade structures: in Spain there has been massive investment in tourism-related construction, including infrastructures (airports, roads, leisure ports); Israel has seen massive inward investment in high-tech by US companies. With the help of US government aid it has been able to develop a weapon industry that could be tested in the battlefield (a pleasure that Spain leaves happily Israel to exert), hence making it very attractive to defense and security consumers elsewhere, e.g. unmanned drones.

Both countries have been diverging also in terms of their demographics, something with huge economic consequences for the future:

Whereas in the 1950s, 60s and 70s both societies were young (although for different reasons), this has changed progressively in Spain in the past three decades. Birth rates have plunged drastically there, but not yet in Israel. The current (2014) fertility rate for Spain is 1.32 children per woman, insufficient to be able to replace the present population over time (not counting on inward migration). This rate is actually one of the lowest in the OECD. In Israel it is 3.08 children per woman, ensuring replacement. The reasons for this state of affairs are well known: women's emancipation in Spain came with democracy at the end of the 1970s (with divorce, abortion, etc); in Israel there was no change from the past (since Israel was already more modern in that respect than Spain under Franco and less modern than Spain in the last decade). The gap in population growth trends between Spain and Israel is certainly not due in the past two decades to migration outcomes. Contrary to what happened before, in the last two decades immigration into Israel has slowed down to almost a standstill, from a peak in 1993. This contrasts with a wave of migration into Spain, particularly from South America, which peaked only around 2008 with the onset of the financial crisis. But the permanent annual immigration flow is still around 200.000. Although a proportion of these immigrants will eventually leave, if something, Spain is more of an immigration country nowadays than Israel and not the other way around.

One important demographic feature is actually a paradox: because both countries have similar Mediterranean diets and excellent health services, their life expectancy is among the highest in the world according to the WHO (2015) and very similar, at 82.8 years in Spain and 82.5 in Israel. Men actually fare better in Israel (80.6) than in Spain (80.1) whereas female life expectancy is notably higher in Spain (85.5) than in Israel (84.3).

Demographically, the two countries have widely differing population structures, which have huge economic implications for the future. In Spain 18% of the population is aged over 65, while the figure in Israel is 12%. The population aged under 15 accounts for only 15% of the total in Spain and 27% in Israel (right after Mexico in the OECD). In short, Spaniards will have an enormous health-related expenditure, proof of which is that Spain is already spending more in health than the average OECD country (9.2% of GDP) and much more than Israel (9.4% and 7.8% of GDP respectively). In the future, Spain will also have a huge productivity problem because of its demographic structure. In other words, a population becoming on the whole older will have to allocate more money for its pensioners and their health problems, which entails money for consumption eating up savings and hence not being free for investment. This can be partially solved by rapidly raising the retirement age, by making it easier for women to both raise a family and work, by taking in more migrants and by making sure that FDI is permanently available so as to offset what is lacking domestically. In any case, productivity is bound to suffer if less rather than more young people enter the labour market in coming years. Israel does not seem likely to face this problem for the next three decades at least, so there is no real pension crisis. But in one respect both countries do face another related problem: a lack of adequate worker training to match the needs of investors and capitalists, who base their long-term economic calculations and prospects on a country's comparative advantages.

Here Israel has a very difficult problem ahead: high-tech industries require much human capital but also ingenuity, which in Israel as elsewhere is very scarce. Thus, there is an increasing income inequality on the horizon, and a huge share of the population does not even want to try to excel in scientific or technical studies because of their choice of lifestyle. Reference can be made here to large sectors of the Israeli population who are ultra-orthodox (Haredis), and their share in the total is increasing. Fortunately, Israeli Arabs do not seem to reject scientific professions if the opportunity arises. It is quite impressive, when visiting pharmacies and hospitals, to see the amount of Arab Israelis working as professionals and mingling quite contentedly with other Israelis.

Spain has a problem with part of its youth but not for the same reason. Clearly there is a huge inadequacy in the education received by most young Spaniards and thereby a significant shortfall in matching the needs of its industry; admittedly, the tourism industry does not require many technicians and engineers, but no young man or woman in Spain should expect to receive a huge wage if working only in tourism, whose Achilles' heel is seasonality. For one thing, Israel spends substantially more than Spain in education (4.3% and 3.3% of GDP respectively), although the results achieved are not too encouraging if judged by the results of PISA exams, where Israel and Spain are barely achieving the OECD average (and having all to envy when considering the Finns and the French).

Dealing with inequality as a flashpoint, OECD statistics for 2013 show that both Israel and Spain are more unequal societies than the average measured by the Gini Index, but Israel more so than Spain (but also more than Portugal and Greece), although in the last five years the two countries' indexes have been converging; inequality, however, should be a more serious problem for Israel than for Spain because the economy's future is based on selling original ideas, which is not widespread among the public at large. On the other hand, Israel has an excellent record in terms of employment as both general and youth unemployment are low (respectively 5.5% and less than 10% in 2013) compared with the OECD average (7.9% and 16% respectively) and much better than Spain, where youth unemployment reached 55% in 2013 and general unemployment was at 26.1%. Employment rates by gender are also higher in Israel than in the OECD and far higher than in Spain. The same holds for annual hours worked.

### In what sense are Israel and Spain still rival economies?

At present, one should clearly focus on GDP per capita, a measure of the production side of productivity and of the consumption side of the standard of living.

Clearly, over the last three decades, and looking at IMF, World Bank and CIA statistics, the GDP per capita of the two countries held similar rankings in the world league. On the whole, until the Great Recession, Spain was leading Israel by 5% to 10%, but the situation has reversed since then. The latest OECD data for 2013 show that the figure for Israel was US\$33,000 while for Spain it was US\$32,523, with the OECD average at US\$37,701. Where do the two countries stand as regards other OECD members? The answer is between the trio Japan, Italy and Korea on the one hand and the trio Slovenia, the Czech Republic and Greece on the other. That is not bad at all.

Digging further, when asked about welfare, Israelis affirm that they are happier than most other people in the OECD including Spain. However, when the UNDP publishes its Human Development Index each year –based not only on GDP per capita but also on life expectancy, health and education–, Spain is systematically higher than Israel.

So the question is which of the two countries is better prepared economically for the medium term (20-30 years)? This is difficult to tell.

Guided strictly by macroeconomic statistics, one would be inclined to answer that Israel is; to illustrate this, there are several hard arguments:

1. Investment in R&D in 2012 reached 3.6% in Israel, 2.4% in the OECD as a whole and 1.3% in Spain: *que inventen ellos*, paraphrasing the Spanish philosopher Miguel de Unamuno.
2. Israel's investment in infrastructure has been increasing in the last decade at high rates, regaining the time lost in the 1980s and 90s. This contrasts with Spain's record, where its efforts date back to the period after Spain's entry into the EU, with the help of European funds. To illustrate the point, according to OECD figures for 2014, Israel invested six times more than Spain in absolute numbers in road construction. This can partially be explained by a wish by successive Israeli governments to catch up with Europe (including Spain).

3. The general government net financial debt as a percentage of GDP has been doubling since 2008 in Spain, reaching 100% now, while in Israel it has dropped to 60% in the same period (despite having to finance a small war in 2009-10).
4. The saving rates of the two countries are currently widely different. Spain's low rate (2.9% of income) contrasts with Israel's high rate (10.3%), which is similar to the figure in Germany and the Netherlands. The gap is certainly partly due to the huge recession still affecting most Spanish households.
5. Israel's population has increased at an annual rate of 1.8% to 1.9% over the past eight years. Spain's has decreased since 2013 at a rate of -0.3%, steadily declining since 2007 at the onset of the great recession, when in Israel the annual rate was around 2% (see above for the reasons underlying the phenomenon).

The very different demographic profiles add to the argument.

However, as always, there are other factors that will not burden Spain's economic potential, unlike Israel, which must deal with its geopolitical environment. The best way to compare the relative political risk assigned by foreign investors to Israel and Spain is by looking at long-term interest rates. They are still substantially higher (although decreasing over time) in Israel than in Spain (1.7% and 1% respectively for the year 2014) and this is even more significant given that the macroeconomic data for the former are much better than for the latter.

Not only is the political environment an obstacle to Israel's growth and development but also its natural environment. Spain is far less polluted and less polluting (in terms of CO2 emissions) than Israel, which is at the OECD average (Spain is at 6 tonnes per capita while Israel is at 10 tonnes). All other things being equal, large countries like Spain tend to be less densely populated than smaller ones, like Israel. Not surprisingly, they are also cleaner. For instance, for similar relative rates of private-car use, it appears that the rate of air and Ghg emissions is much higher in Israel than in Spain. Not only is high population density an environmental factor working against Israel but also the exiguity of good land for agricultural use, which Israel, but not Spain, offsets by using huge amounts of fertilizer per unit of production. The so-called nutrient balance is at 93.4kg per hectare in Israel but at 11.3kg in Spain. The environmental gap in Spain's favour could grow even more not only because it is a champion in renewable energies: in 2010 Israel entered a new era after discovering huge gas deposits close to its shores, thereby increasing the environmental risk for most of the Israeli population, settled on the Mediterranean coast. Dr Gonzalo Escribano, an analyst at the Elcano Royal Institute, has rightly argued that since Spain is taking security risks by relying for 60% of its gas consumption on a single country (Algeria), it has an obvious interest in cooperating with Israel as the two countries are complementary in terms of non-renewable energy resources, not rivals.

And then one must not forget the very important dissimilarity between Spain and Israel which cannot make the two countries rival economies: their relative economic size.

Spain will always have a huge absolute, although decreasing, advantage over Israel in terms of economic power and size. In terms of GDP, Spain is still five to six times larger than Israel, because its population is also five to six times greater. In that respect, Spain



will also be able to look down for a while on Israel, as it does on Ireland, another roaring tiger. Israel will never be among the G-20, but Spain will be. In perspective, however, in the 1980s Spain was seven to eight times larger than Israel in economic terms; currently, it is 'only' five to six times greater.

It should be noted that the fact that Spain is a 46-million population economy very much limit the phenomena that so much hurt Israeli consumers, namely private monopolies and oligopolies. The latter are less likely in large countries such as Spain, Mexico or Turkey. In Israel there are only two large banks because it is such a small country. Housing in Israel is so expensive because urban land is very scarce and agricultural land is slowly disappearing. Food is expensive not only because food distributors form oligopolies but also because farmers are artificially sheltered from foreign competition. This is a kind of paradox: Israel is in many cases a less open economy than Spain, when theory would suggest that it should be the contrary. Spain has chosen to be part of the European Single Market and the euro-zone and to live with strong all-European competition. It is interesting to note that according to OECD indicators, Spain has become a slightly more open economy than Israel, reversing previous trends. Bravo for Spain, but bad for Israel...

## Conclusions

For a long time, until the 1980s, Spain and Israel were considered by the economic experts of international organisations such as the World Bank, the IMF, the OECD, GATT, UNCTAD and the EC itself as so-called NICs, namely Newly Industrialised countries. Sometimes they were referred to as semi-industrialised economies because of the importance in their export baskets of agricultural and mineral extraction products (including phosphates and cement).

A decisive moment for both countries came with the southern enlargement of the EC in 1986.

For Spain it meant open and unimpeded access to the vast agricultural, fisheries and agro-business markets of Central and Northern Europe, allowing the development of a huge and sophisticated food industry. A second advantage of accession was the possibility rapidly exploited by Spanish entrepreneurs of integrating EU-based value chains, known as intra-industry trade by international economists. The car industry is a good example. Proximity to Europe played a role in the development of a sophisticated clothing industry based on a rapid turnover of stocks for a public eager for changing fashions more than seasonally. Accession to the EU was also a reinforcing factor for the tourism sector, which was already booming by 1986.

For Israel it became clear that basing its future on the export of agro products was a non-starter given the fast-growing urbanisation of its fertile coast and Spain's entry into the EU, Israel's principal export market for fruits and vegetables. Advanced agricultural technologies, of which Israel had made a name for itself since its creation, could not counter the handicap of the exiguity of the arable land available. Exploiting the Mediterranean tourism potential was out of the question as long as there were no clear signs of peace on the horizon. Nor was it possible to attract multinationals to integrate

value chains because of the invisible influence of the Arab boycott. On the other hand, the ever-increasing strategic links with the US since the Six-Day War made it possible to develop fruitful cooperation in the development of both hardware and software linked to defence and security. Israel started to develop and export weapons, defence technologies and also optical instrumentation. Many of these products and services are of double use and Israeli firms progressively started to be interested in developing security products for the civilian markets. The early growth of high-tech industries already in the 1990s is not only due to the link with the US but because the country had the human capital resources to develop those industries. Apart from the existence of top-class universities and technological institutes, Israel benefited in the early 1990s from the unexpected inflow of citizens from the former Soviet-Union, that had just collapsed, including thousands of engineers and mathematicians, that were rapidly integrated into an expanding sector. By the year 2000 the high-tech industry was established.

Looking ahead, Spain will have to adapt its production and export structures to a changing demography, which makes it one of the oldest societies in Europe and in the world at large. The increasing mechanisation of labour-intensive processes and even medium-range technologies in the food and car industries is another challenge, because the level of human capital is found wanting by many multinational companies that might prefer moving to some Central and Eastern European countries or to the Far East.

For Israel, the nature of the challenges ahead is different than for Spain. There is no problem, at least for several decades, with its demographic structure, very young by OECD standards, which will well serve the economy. The real problem and one of the principal challenges it seems, will be simply maintaining the current levels of its existing human capital. First, the effects of the former Soviet immigration of the 1990s seem to have been exhausted. Secondly, the growth of the population due to the large number of children born into orthodox families is not likely to translate into the creation of just the kind of human capital needed in high-tech industries. The other two challenges are of a nature that, fortunately for Spain, the latter does not confront. The first is a hostile political environment, translating into high political risk as perceived by foreign investors. The second, not frequently and sufficiently underlined by policy experts, is Israel's small geo-economic size. Clearly these latter two factors can only (and even then partially) be overcome by making peace with its neighbours.

From the above analysis, it is obvious that the scope of economic cooperation between the two Mediterranean countries considered is immense and has so far not been duly examined or exploited by enterprises in either country. This analysis should provide some food for thought in this respect.