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Under-explored Treasure Troves of Development Lessons - Lessons from the Histories of Small Rich European Countries (SRECs)

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1. Introduction: Lessons from History, or rather the 'Secret History'

The development orthodoxy of the last quarter century has espoused a free-market policy. It has argued for, among other things, free trade, deregulation of foreign investment (FDI), privatization of state-owned enterprises (SOEs), and strong protection of intellectual property rights (IPRs), as key policies that are needed for developing countries to grow and develop their economies.

In the promotion of these 'good policies' by the orthodoxy, the history of today's rich countries has played an important rhetorical role. It is explicitly and implicitly suggested that those countries have become rich only because they followed those 'good' policies – the implication being that countries trying to do it in a different way is bound to fail, as it is more or less going against the 'law of nature'. The awkward examples of the East Asian countries (such as Japan, South Korea, and Taiwan), which used protectionism, restrictions on FDI and other 'bad' policies, are brushed away as 'exceptions that prove the rule'.

However, it is increasingly known that the 'real' histories of the rich countries are very different from the 'official' history that forms the backdrop to the orthodoxy,

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(Bairoch, 1983, was the pioneer; Chang, 2002 and 2007, and Reinert, 2007 are main recent contributions).

Not just countries like Japan and Korea, whose trade protectionism is well known, but all of today's rich countries have used protectionism for substantial periods, except for the Netherlands and (until World War I) Switzerland. In particular, it is important to note that, contrary to conventional wisdom, Britain and the US – the supposed homes of free trade – were in fact the most protectionist economies in the world in their respective catching-up periods (between the early 18th century until mid-19th century for the former and between the mid-19th century until World War II). Indeed, it was none other than the first US Treasury Secretary, Alexander Hamilton, who invented the so-called infant industry argument, which provides the strongest justification for protectionism in developing countries (Chang, 2002, ch. 2; Chang, 2007, chs 2-3).

Many of today's rich countries regulated FDI when they were on the receiving end – the US, Japan, Finland, Korea, Taiwan are particularly striking examples (Chang & Green, 2003; Chang, 2007, ch. 4). In the 19th century, the US banned or heavily regulated FDI in natural resource exploitation (such as mining and logging), coastal shipping, and finance (banking and insurance) – sectors where FDI were concentrated at the time. In national (as opposed to state-level) banks, foreigners could not become directors and foreign shareholders were not even allowed to vote in shareholder meetings. Japan, and to a lesser extent Korea and Taiwan, more or less banned foreign direct investment in key sectors and heavily regulated them in other sectors until the 1980s. Finland also had draconian regulation on FDI until the 1980s (more on this later).

Many of today's rich countries used SOEs extensively when they needed them (Chang, 2007, ch. 5; Chang, 2008). In the early 19th century and the late 19th century respectively, Germany and Japan kick-started their industrializations with SOEs (then known as model factories) in industries like textile, steel, and shipbuilding. In the post-WWII period, France, Norway, Finland, Austria, Taiwan, and Singapore used SOEs extensively to modernize their economies.

In the early days of their industrialization, when they needed to import technologies from abroad, today's rich countries all protected IPRs of foreigners only weakly (Chang, 2001; Chang, 2007, ch. 6). Many of them explicitly allowed the patenting of foreign inventions, while the Netherlands and Switzerland openly refused to introduce patent law until the early 20th century (more on these later).

The examples could go on, but the point is that none of today's rich countries that have become rich without violating at least some (and often all) of the recommendations of today's economic orthodoxy. The obvious conclusion is that all those supposedly 'bad' policies – protection, regulation of FDI, use of SOEs, violation of IPRs – may not be as bad as the orthodoxy makes them out to be or may even be beneficial, or even necessary, in early stages of economic development.

However, this obvious lesson is generally ignored in the orthodox circles.[2] Most people still firmly believe in the 'official history'. Worse, even as the 'secret

[2] In those rare occasions where the existence of these policies are acknowledged, it is argued that these countries have developed *despite*, rather than because of, these 'bad' policies, as they had other factors that more than cancelled out the costs from such policies. For example, Irwin (2004) argues that the US would have developed with or without high tariffs, because it had so many favourable factors for development, such

history' of capitalism is increasingly revealed, the rich countries have been making it increasingly more difficult for the latter countries to use policies that they used when they were developing countries themselves. Over the last quarter of a century, the IMF and the World Bank conditionalities, the conditions attached to bilateral aids, the WTO rules, and the intellectual hegemony of the rich countries, especially the Anglo-American countries, have continuously reduced the range of 'acceptable' policies for developing countries (Chang, 2007, ch. 1).

In so far as they acknowledge the 'secret history', the rich countries try to justify this practice of telling developing countries 'do as we say, not as we did', by arguing that 'times have changed'. It is argued that, thanks to globalization in recent years, restrictive policies that may have been beneficial in the past are no longer so, and therefore that the policies of the past cannot be a guide to today's policy.

One problem with this argument is that there is no clear evidence that we are now living in such a 'brave new world' that all past experiences are irrelevant. The fact that China and India have succeeded in growing fast during the period of hyper-globalization since the 1980s, despite (or rather because of) using many of the restrictive policies that I have listed above, is a testimony to the fact that many of those allegedly 'obsolete' policies are still valid. Indeed, the period in which most of today's rich countries industrialized using 'wrong' policies was another era of high globalization in the late 19th and the early 20th century, when the world economy was as much, or even more in areas like immigration, globalized as that of today (Hirst & Thompson, 1999, ch. 2, Kozul-Wright & Rayment, 2007, ch. 2).

Moreover, globalization is not a process beyond human control. The global economy has evolved in the way it has at least partly because of the conscious political decisions by the rich countries to adopt (and impose) liberal policies. Many of the 'bad' policies cannot be used simply because the rich countries have re-written the global rules and banned their use. For example, import quotas or export subsidies cannot be used because the WTO has banned them (except for the least developed countries in the case of export subsidies). Many policies that are still permitted have become less effective at least partly because of the changes in global rules in other areas. For example, regulation of FDI has become less effective because many developing countries have opened up their capital market and made it easier for transnational corporations to leave. If the rich countries are willing to re-write the rules of the global economy, many of those 'obsolete' policies will become usable and/or more effective again.

Of course, in criticizing this 'end of history' point of view, I do not wish to create the impression that there is no limit to drawing lessons from historical cases. All historical cases have occurred, by definition, in a particular context – with a conflation of particular national and international factors – and it is impossible to replicate all, or even most, of these factors. However, no one is – at least I am not – suggesting that today's developing countries can, or indeed should, exactly copy the policies used by, say, 19th century US or the 1950s Austria. All I am suggesting is that our thinking on development policies can enormously benefit by looking at historical cases.

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as large domestic market, abundant natural resources, influx of immigration. The problem with this argument is that the 'heterodox' packages have worked across countries with very different conditions, thus making it impossible to 'explain away' bad policies by invoking factors unique to each country.

First of all, looking at historical cases, recent and distant, expands our 'policy imagination'. This is because, as they say, 'life is often stranger than fiction'. Real life examples often produce policy and institutional combinations that are impossible to imagine on the basis of pure theory. For example, despite its reputation for free trade and welcoming attitude towards foreign investors, not only does Singapore produces 22% of GDP in the SOE sector but its government owns virtually all the land, supplies 85% of housing, and runs one of the most draconian forced-savings scheme in the world (Chang, 2008, Box 1). Likewise, as we shall discuss later, Sweden and Denmark have built two of the most equitable and prosperous societies in the world, despite each having a single family dominating the economy. Even the most imaginative theoretical economists would not have been able to come up with these models, had they not known about actual Singapore, Sweden, and Denmark. By looking at historical cases, we get to break out of pre-conceptions on what is possible, and can expand our policy horizon.

Second, I believe that we have the moral duty to extract as many lessons as possible from history (recent and distant), given that 'live experiments' in development policy can have, and often has had, huge human costs. The human costs of all those policy experiments that were supposed to provide the 'final' solution – such as Soviet-style central planning and IMF-World Bank structural adjustment programmes (SAPs) – are well known. Even when the experiments are not based on such 'arrogant' theories, mistakes do happen. If we can learn the right lessons from experiments that have already been done (i.e., history), we can avoid costly policy mistakes. It is our moral duty to do so.

Given these, there is a strong case for digging deeper into the 'secret history of capitalism'. An even stronger case can be made for doing further research on the histories of what I call the SRECs – or small rich European countries – which are Austria, Belgium, Denmark, Finland, the Netherlands, Norway, Sweden, and Switzerland. For the histories of these countries are even less well known than those of the bigger rich countries like the US, Britain, France, Germany, and Japan.

One reason for the relative neglect of the SRECs is that the large countries naturally get more attention. They are obviously more visible. They tend to be more successful – their size is in part a reflection of their successes. Being large, they have more native researchers and usually command more resources in absolute terms to fund research about themselves, both home and abroad. To put it more bluntly, it is natural that more people are working on the US history than the history of, say, the Netherlands. However, that does not necessarily mean that the US is a more interesting case.

Another factor that has led to the relative neglect of the history of the SRECs is that the Anglo-American countries have had international economic, political, and cultural hegemony throughout most of the last two centuries. As a result, the view has developed that those countries – especially the two hegemons, Britain and the US – are representative, or even the role model, of the 'rich world'. This is particularly obvious in the so-called global standard institutions discourse, where Anglo-American institutions are presented as 'standard' or at least 'best practice' institutions (Chang, 2005). Given the tendency to believe that Britain and the US represent 'the West', the SRECs are either seen as smaller, slightly wonky version of the US or Britain, or seen as 'deviant' economies which will sooner or later have to conform to the Anglo-American standards or face decline.

Yet another reason resides with the SRECs themselves. The scholars from the SRECs simply do not write much *for foreigners, especially for poor foreigners,* about their histories. Language ability is only a small part of the explanations, as the citizens of most SRECs are famous for speaking good English for non-native speakers. The researchers from SRECs do not seem to fully realise how interesting their own countries' experiences are. Or they seem to think that other people cannot possibly be interested in a 'boring little country' like theirs.

However, as I will try to show in the rest of the paper, the SRECs offer a wealth of interesting lessons for today's developing countries. I daresay that their histories are even more relevant than those of the large rich countries for a number of reasons.

First, typically developing countries are small, like the SRECs (among which the Netherlands, with 16 million people, is the biggest). There are only a dozen or so developing countries with more than 50 million people.[3] The median size developing country has only about 20 million people. Of 58 African countries (both North Africa and Sub-Saharan Africa), there are only 12 countries that have populations over 20 million.[4]

Second, both the SRECs (with the partial exception of the Netherlands with its global commercial network and a significant empire) and most today's developing countries are not significant players in the international economic and political systems. Changing the international environment is simply not a solution open to them, which limits their policy options.

Third, the SRECs have laboured under natural, cultural, and political conditions that many of us think are unique to developing countries today – colonial legacy (Finland, Norway, Belgium, and the Netherlands), ethnic division (Switzerland, Belgium, Finland, Sweden), religious division (Switzerland), ideological division (Finland and Sweden), difficult natural conditions (landlockedness and mountains of Switzerland and vulnerability to natural disasters in the Netherlands), the so-called 'resource curse' (Sweden, Finland, and Norway), and so on.

In this paper, I will discuss selected aspects of the histories of the SRECs and try to draw some lessons for today's developing countries. This means that I am leaving out such features of the SRECs like social corporatism and the welfare state, which I think are less directly relevant for today's developing countries, although we can still draw indirect lessons from these aspects. I will discuss broadly four areas: agricultural development (the Netherlands, Denmark); various aspects industrial development (Belgium, Switzerland, Austria, Finland, and the Netherlands); corporate

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[3] They are, in alphabetical order, Bangladesh (144 million), Brazil (189 million), China (1.31 billion), Democratic Republic of Congo (58 million), Egypt (75 million), Ethiopia (73 million), Indonesia (223 million), Iran (69 million), Mexico (104 million), Nigeria (145 million), Pakistan (159 million), the Philippines (85 million), Thailand (65 million), Turkey (73 million), and Vietnam (84 million). The population figures are from the World Bank (2008), Table 1.

[4] As of 2006, they are, in ascending order, Ghana (23 million), Uganda (30 million), Morocco (30 million), Algeria (33 million), Kenya (35 million), Sudan (37 million), Tanzania (39 million), South Africa (47 million), Democratic Republic of Congo (59 million), Ethiopia (73 million), Egypt (45 million), Nigeria (134 million). The population figures are from the World Bank (2008), Table 1.

governance and the concentration of economic power (Sweden and Denmark); political and social factors (Belgium, Switzerland, Finland, and Sweden).

The paper is *not* meant to provide a comprehensive discussion of any of the SRECs' history, which is way beyond its scope. It is not even intended to provide a full account of those aspects that it does discuss. Sometimes there is simply too little information – partly due to language barriers but mainly due to the sheer absence of research on the topic even in native languages – for me to do much more than drawing people's attention to an issue, rather than providing a proper discussion of it.

The paper is merely intended to demonstrate that the histories of the SRECs are hidden treasure troves of very useful lessons for today's developing countries and that investment in further research on them (with an explicit intention to draw lessons for developing countries) will be very useful.

2. Agriculture

2.1. The Netherlands: Agricultural Success without Land

The Netherlands, at 395 persons per km^2, has the fifth highest population density in the world, excluding city states or island states with territories less than, and including, that of Hong Kong (1,099 km^2). Only Bangladesh (1,045 persons per km^2), Taiwan (636 persons per km^2), Mauritius (610 persons per km^2) and South Korea (498 persons per km^2) have higher population densities.[5] Despite this, the country is today the second largest (according to Verhoeff et al., 2007) or the third (according to the website of the Dutch Embassy in Korea website[6]) exporter (in value terms) of agricultural products. How has the country been able to develop agriculture so much, when land – presumably the most critical input into agriculture – is the last thing it has in abundance?

Obviously, the private initiatives of Dutch farmers have been important. However, public policy and public-private partnerships have played equally important roles. It was through public policy intervention that the Dutch farmers' (individual and collective) capabilities, which determine their willingness to take initiatives and the chances of success for the initiatives, were raised to a level that was equal to the challenges of maintaining high-productivity agriculture into the industrialization period and beyond.

Although the Dutch government set up the Agency for Agriculture, focusing on collection of agricultural statistics, as early as in 1800, it was closed in 1813 (Verhoeff et al. 2007). It was not until the 1870s that it started implementing agricultural policies (Knibbe, 1993, pp. 160-1; Koning, 1994, p. 52). The turning point came with the establishment of the State Commission on Agriculture in 1886 (Koning, 1994, p. 86). After that, 'government support of farm progress was vigorously expanded' (Koning, 1994, p. 128). The intervention focused on what Verhoeff et al. (2007) call the 'EER triptych' – education, extension, and research.

First, education. In 1875, the Dutch government took over the financing of the agricultural school in Wageningen (set up by a local private initiative in 1873)

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[5] http://en.wikipedia.org/wiki/List_of_countries_by_population_density. This is not counting the Palestinian territories (6,020 km^2 of territories and population density of 667) and Puerto Rico (8,875 km^2 of territories and population density of 446), which are not fully independent states.

[6] http://southkorea.nlembassy.org/agriculture_korea

(Verhoeff et al., 2007, p. 333). Specialized agricultural secondary schools were set up (FAO, 1950, p. 8). Since the 1890s, the Dutch government also introduced 'winter courses', providing 150-225 hours of education over one or two winter seasons, covering 5% of each age cohort of the farmers by 1920 (Knibbe, 1993, p. 163). One contemporary research categorically says that 'the modernization of Dutch agriculture [between 1890 and 1930] is largely the result of agricultural education in its most basic form, such as winter-courses and experimental plots [see below – H-JC]' (Frost, 1930, p. 102, as cited in Knibbe, 1993, p. 163).

The Dutch government also introduced extension services in 1890, first in crops and then in horticulture and dairy production. Even though there were less than 40 'agricultural consultants' (*wandelleraren*) for the whole country (32 in 1907 and 36 in 1913), they supervised hundreds of 'experimental plots' – whose number was only one in 1890, but rose to 809 in 1905 and to 1,020 in 1910 (Knibbe, 1993, pp. 161-2; also see Zanden, 1994, p. 185). Extension services were closely coordinated with research. Usually (especially after 1945) the director of the experimental station (conducting research) was also the head of the extension service (Verhoeff et al., 2007, p. 342).

The Wageningen agricultural school was upgraded to a university in 1918 (Ingersent & Rayner, 1999, p. 45), when it also established the Bulb Research Centre, which then became an experimental station in 1965, from then on funded 50% by the private sector (Verhoeff et al., 2007, p. 334, p. 346). There was a vast increase in the number of disciplinary-oriented research institutes between 1940 and 1960, many of which were attached to the University (Verhoeff et al., 2007, p. 336). In 1975, there were more than 25 government-financed research institutes, covering a wide range of areas (Verhoeff et al., 2007, p. 336).[7] There were research institutes started first by private initiatives, notably horticultural demonstration gardens, but over time they acquired public funding, typically 50% funded by the government (Verhoeff et al., 2007, p. 346).

In addition to the EER triptych, the government also provided subsidies to breeding programmes and provided inspection of livestock and of livestock products (Koning, 1994, p. 128). It also provided financial support for plot consolidation in the 1920s (ingersent & Rayner, 1999, p. 30). After the Great Depression, it provided tariff protection for its farmers, despite its earlier refusal to introduce agricultural tariffs in the late-19th century, when most European countries started protecting their agriculture against New World and Russian imports (Knibbe, 1993, pp. 196-8).

The Dutch example shows the importance of education, extension, and research in building productive agriculture. It also shows the benefit of a flexible approach to public-private collaboration – sometime the Dutch government totally took over private initiatives (e.g., Waigeningen college), stepped in with partial public funding of private initiatives (e.g., horticultural demonstration gardens), but also partially handed over public initiatives to the private sector (e.g., the Bulb Research Centre). More research on technological and organizational innovations in Dutch agriculture and drawing explicit lessons for today's developing countries from them will be very useful.

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[7] They ranged from breeding (separate institutes for arable crops and horticultural crops), poultry, animal (separate institutes for husbandry and health), engineering (separate institutes for agriculture and horticulture), storage and processing (separate institutes for agriculture and horticulture), forestry, soil mapping, water management, pesticide, food quality and safety, and so on

2.2. Denmark: (International) Competition through (Domestic) Cooperation

The first successful co-operative, a consumer co-operative, was Britain's Rochdale Society of Equitable Pioneers, founded in 1844. The idea was developed into agricultural co-ops in Germany and Denmark.

Germany was a pioneer in credit co-ops. In 1864, Friedrich Wilhelm Raiffeisen set up co-operative banks, which later came to be known as Raiffesisen co-operative banks after the founder's name, in response to the tendency of the state agricultural bank, or the Hypothekenbanken, to lend only to large farms.

Agricultural co-ops blossomed in Denmark (Tracy, 1989, pp. 113-4). Credit co-ops emerged from the 1850s and retail co-ops since 1866. Co-op development in agriculture was facilitated by the transition to livestock production, which necessitated arrangements for rapid and efficient processing and marketing (especially export marketing), which was beyond the means of the individual small producer. Co-op dairies emerged from 1882 and co-op bacon factories since 1887. Egg export co-ops were started in the 1890s (starting date unclear). After the Great Depression, the government subsumed export marketing co-operatives and ran state export boards (Murphy, 1957, pp. 367-8). In addition to production co-ops, which helped with processing, marketing, input purchase, and machine timeshare, there were also co-ops for irrigation and drainage.

With the help of the co-ops, the Danish farmers could tide over the influx of cheap grains from the New World and Russia in the late 19th century without tariff protection. Not only that. They managed to establish a very competitive export-oriented agriculture. They switched from grain production to dairy and bacon production, using the cheaper imported grains for animal feed, jointly purchasing expensive inputs (e.g., cream separator, slaughter facilities), and jointly conducting marketing, especially export marketing, as these products were mainly destined for Britain and, to a lesser extent, Germany.

Today, the idea behind the co-op is widely accepted across political spectrum to be the way forward for small and medium-sized farmers in developing countries. However, the differing successes of co-ops in different countries suggest that organizational details and implementation techniques matter a lot. Unfortunately, we don't seem to have much information in this regard, at least in the social science literature. Given this, looking more closely at real life success story with co-ops like the Danish case (together with the Japanese one, which developed generalized, rather than specialized, co-ops) would be extremely useful.[8]

3. Industrial Development

3.1. Belgium: The Unrecognized Industrial Power

Unbeknownst many people, parts of Belgium (before its formation as a country), such as Bruges, Ghent, and Ypres, were the manufacturing centres of Europe until the 17th century, due to their dominant position in woollen manufacturing,

[8] Actually, the Danish experience with co-ops was much studied in the 1930s in the English-speaking world, especially when the Americans were interested in the idea, but there is relatively little recent literature in English on it, and even fewer that draw explicit lessons for today's developing countries.

the then high-tech industry of Europe (Chang, 2002, p. 19). Although these parts declined subsequently due to the rise of the British woollen manufacturing industry (which was orchestrated by the British state; see Chang, 2002, pp. 19-21), Belgium managed to maintain its industrial strength into the era of the Industrial Revolution on the basis of coal and metallurgical industries (Abeloos, 2008, p. 109; Boschma, 1999, p. 859). Since then it has remained one of the most industrialized countries in Europe, and the world.

How could this small, densely-populated country[9] with history of foreign domination and internal division (more on this later) manage to stay right near the top of international industrial league table for centuries?

There is no straightforward answer to this, but two issues stand out.

First, in relation to the role of the state, Belgium is often known as a free-trading nation, but its history is actually more complex than that. It did practice liberal trade policy between the 1860s and the 1930s (Abeloos, 2008), but there were considerable state intervention outside this period (Chang, 2002, pp. 42-3; Boschma, 1999, p. 861).

There were significant tariffs and state subsidies during the Austrian rule during the first three quarters of the 18th century, in an attempt to protect the industries from the English and the Dutch competitors. There were strong state supports for industrial development during the reign of King William I, the joint monarch of the Netherlands and Belgium during 1815-30. King William tried to encourage Belgian industries by even sinking his own private wealth (Mokyr, 1974, p. 374). After separation from the Netherlands, the Belgian state invested heavily in railways, especially after 1834 (Abeloos, 2008, pp. 108-9). Before its transition to free trade in the 1850s, some industries were heavily protected – tariffs reached 30-60% for cotton, woollen and linen yearn, and 85% for iron.(Chang, 2002, p. 43).

After the 1930s, the Belgian government shifted to a more interventionist stance. Significant protection was introduced in the 1930s (Abeloos, 2008, p. 109). Especially between the end of WWII and the 1970s, the Belgian government provided low-cost loans, R&D subsidies, and tax incentives for industrial development (Katzenstein, 1984, pp. 67-8).

The Belgian history with trade and industrial policies shows that it may be important to shift policies when conditions change – shifting from interventionism (until the 1850s) to free-trade (until the 1930s) and then back to interventionism (after the 1930s), with changes in Belgium's relative position in the international economic hierarchy.

The second interesting aspect of Belgian economic history is that the country was a leading innovator in terms of financial institutions and corporate governance. There are studies that highlight the role of banks and holding companies during the late 19th century and the early 20th century (Mommen, 1994). Especially, joint stock banks were pioneered in Belgium (Boschma, 1999, p. 861). It is said that Japan deliberately copied the Belgian central bank as the 'best practice' specimen during the Meiji period (Westney, 1987, ch. 1). It would be interesting to see some systemic

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[9] According to the criteria we used above (no country smaller than Hong Kong in area, no colony), Belgium (at 341 persons per km^2) is the 9th most densely populated country in the world, after the Comoros (357 persons per km^2), Lebanon (344 persons per km^2), and Rwanda (343 persons per km^2). The data are from http://en.wikipedia.org/wiki/List_of_countries_by_population_density.

attempt to see whether we can draw useful from the Belgian experiences with institutional innovation for today's developing countries.

3.2. Switzerland: The Most Industrialized Country in the World

Most of us think of Switzerland as a service-based economy, living on activities like finance and tourism. However, unbeknownst to most people, Switzerland is in fact the most industrialized economy in the world. As of 2002, it had the highest per capita manufacturing output in the world by far – 24% more than that of Japan, the second highest, 2.2 times that of the USA, 34 times that of China, today's 'workshop of the world', and 156 times that of India.[10]

How has this continued industrial strength been possible, especially when the country has so many conditions that are supposed to hamper economic development in developing countries today – being landlocked, difficult terrain that make infrastructural development expensive, and ethnic and religious divisions (more on the last later)?

It seems clear that the Swiss federal government has few tools for promoting industrial development, although it has modestly contributed to supporting R&D (Katzenstein, 1985, p. 71). There seems to be more industrial policy going on at the cantonal level, but we do not have much information on what the cantonal governments do. David & Mach (2007) document that cantonal and municipal governments helped Swiss national companies by providing them with subsidized gas and electricity (p. 225). Katzenstein (1984) suggests that the industrial crisis of the 1970s prompted many (although not all) cantonal governments to develop industrial policy, albeit of rather reactive and superficial kinds (pp. 154-5).

But is that all? Given the decentralized character of the Swiss polity and the geographical concentration of industries (e.g., chemicals and pharmaceuticals around Basel, watch-making in French-speaking cantons, machinery in the Germanic cantons), there may be more things going on at the cantonal level, but we simply do not have enough information.

How do the Swiss do it? Are the Swiss keeping their development history a secret, as they are supposed to do with banking information? Or is it the case that the Swiss do not know the secrets of their national success themselves? We need a more systematic and deeper look at the country.

3.3. Austria: State-Owned and State-Financed Success Story

Austria is the unrecognized 'miracle' economy of the post-WWII years. Although its growth has significantly slowed down since the 1990s, between 1950 and 1987, per capita GDP in Austria, at 3.9% per annum, grew faster than that of West Germany, the 'Miracle on the Rhine' which grew at 3.8%. This is second only to Japan (6%) among the above-mentioned 16 largest rich countries of today (Maddison, 1989, p. 15, table 1.2).

What is interesting is that this growth occurred with one of the largest SOE sectors in the world. Until the massive privatization in the 1990s, Austria had the

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[10] In 2002, manufacturing value-added per capita in 1995 US dollars was $12,191 in Switzerland. $9,851 in Japan, $5,567 in the USA, $359 in China, and $78 in India. See UNIDO (2005), *Industrial Development Report 2005* (United Nations Industrial Development Organisation, Vienna), Table A2.1.

largest SOE sector among the OECD countries, both in terms of its share in GDP and in investment. Internationally comparable figures in this regard are not easy to get, but according to the comprehensive study for the IMF by Short (1984), the share of the SOE sector in total GDP in Austria was 15.8% in 1970-3 and 14.5% in 1978-9. The corresponding figures were 12.8% in France (1966-9), a country known for the dominance of SOEs during the period, and 11.3% in the UK (1974-7). A more recent World Bank study (World Bank, 1995) shows the share of SOEs in Austrian GDP as 13.9% in 1986-91, as against 10% of France and 3% of (now much-privatized) UK (Appendix, Table A-3).

The Austrian government also provided huge amounts of direct and indirect subsidies through tax measures, state-owned banks, and investment funds. In 1980, there were 30 public investment funds at the federal level and 95 funds at the provincial level (Katzenstein, 1985, p. 76; the following figures in this paragraph are also from the same source). Between 1963 and 1979, the Counterpart Funds of the European Recovery Programme, Austria's biggest investment fund, alone provided investment subsidies amounting to 16% of total industrial investment. In the late 1970s, 40% of the total volume of credits and loans extended to firms and individuals were subsidized.

Of course, according to the prevailing orthodoxy, such prominence of SOEs and state investment funds should have prevented Austria from developing its economy. How has this not happened? One could argue that Austria grew fast despite, rather than because of, SOEs and state investment funds, but this is simply not plausible. Their sheer magnitudes are such that it would have been impossible for SOEs state investment funds to have played a negative role, when the economy was the second-fastest growing among the OECD countries.

Having said that, we need more industry-level information, if we are to draw more useful lessons from the Austrian experience. For example, there does not seem to be a good account, at least in English, of how Austria was able to build a world-class auto parts industry, without having a final assembler of its own. Also, there are scintillating suggestions that industrial cooperatives and clusters have played an important role at least some geographical areas in some periods, but there is very little information on them, at least in English.[11]

3.4. Finland: The Anti-Foreign Globalizer

Finland is often overlooked as one of the economic miracles of the 20th century. According to the authoritative statistical work of Maddison (1989), among the 16 largest rich countries of today, only Japan (3.1%) achieved a higher rate of annual per capita income growth than Finland (2.6%) during the 1900-87 period (p.

[11] For example, there is a book by Barbara Schleicher in German, called, *Heisses Eisen: zur Unternehmenspolitick der Österreichisch-Alpine Montangesellschaft in den Jahren, 1918-1933* (Hot Iron: on the Corporate Policy of the Austrian Alpine Montan Cooperative during 1918-1933) (P. Lang, Frankfurt am Main, 1999)

15, table 1.2).[12] Norway tied with Finland in second place, and the average for all 16 countries was 2.1%.[13]

What is even less well known than Finland's impressive growth performance is that it was built with a regime of draconian restrictions on foreign investment in place – arguably the most restrictive in the developed world, with the possible exception of Japan, the top growth performer.

As a country that had been under foreign rule for centuries[14] and as one of the poorest economies in Europe, Finland was naturally extremely wary of foreign investment and duly implemented measures to restrict it (all information in the following paragraphs is from Hjerppe & Ahvenainen, 1986, pp. 287-295, unless otherwise noted).

Already in the second half of the 19th century, Finland introduced a series of laws restricting foreign investment (with the exception of the Russian nobles, as the country then was a Russian colony) in land ownership and mining and banning foreign investment in banking and railways. In 1895, it was stipulated that the majority of the members on the board of directors of limited liability companies had to be Finnish. All these laws remained valid until at least the mid-1980s.

After independence from Russia, restrictions on foreign investment were strengthened. In 1919, it was stipulated that foreigners had to get special permission to establish a business and guarantee in advance the payment of taxes and other charges due to the central and the local states. In the 1930s, a series of laws were passed in order to ensure that no foreigner could own land and mining rights. It was also legislated that a foreigner could not be a member of the board of directors or the general manager of a firm. Companies with more than 20% foreign ownership were officially classified as "dangerous companies" and therefore foreign ownership of companies was restricted to 20%.

There was some liberalisation of foreign investment in the 1980s. Foreign banks were allowed for the first time to found branches in Finland in the early 1980s. The foreign ownership ceiling of companies was raised to 40% in 1987, but this was subject to the consent of the Ministry of Trade and Industry (Ballek & Luostarinen, 1994, p. 17). General liberalization of foreign investment did not come until 1993, as part of the preparations for its EU accession (www.investinfinland.fi/topical/leipa_survey01.htm, p. 1).[15]

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[12] The 16 countries are, in alphabetical order, Australia, Austria, Belgium, Canada, Denmark, France, Finland, Italy, Japan, the Netherlands, Norway, Sweden, Switzerland, West Germany, the UK, and the USA.

[13] Despite the massive external shock that it received following the collapse of the Soviet Union, which accounted for over one-third of its international trade, Finland ranked at a very respectable joint-5th among the 16 countries in terms of per capita income growth during the 1990s. According to the World Bank data, its annual per capita income growth rate during 1990-99 was 2.1% (equal to the Netherlands), exceeded only by Norway (3.2%), Australia (2.6%), and Denmark and the USA (2.4%).

[14] From the 12th century until 1809, Finland was part of Sweden; thereafter it existed as an autonomous Grand Duchy within the Russian empire until 1917.

[15] Interestingly, the Finnish government's investment-promotion agency, Invest in Finland, emphasises that "Finland does not 'positively' discriminate in favour of foreign-owned firms by giving them tax holidays or other subsidies not available to other firms in the economy" (the same website, p. 2).

The Finnish history goes totally against the conventional wisdom regarding the role of FDI in economic development. If FDI is so good for economic development, how come two countries with the most draconian regulation against FDI – Japan and Finland – top the OECD growth league? The Finnish case is even more puzzling than the Japanese case, because as a very small economy (a population of 3-4 million against Japan's 100-120 million), Finland should have suffered even more for its 'closedness'.

3.5. Switzerland (again) and the Netherlands: Innovation without Patents

As mentioned in the introduction, the protection of IPRs, especially foreigners' IPRs, was very weak until the 19th century, when today's rich countries established their industrialization process. However, the Netherlands and Switzerland went a step further and did without a patent law altogether.

Switzerland did not introduce any patent law until 1888. When it did, its patent law protected only mechanical inventions ("inventions that can be represented by mechanical models"; Schiff, 1971, p. 85), where it already had international technological advantages. Only in 1907, partly prompted by the threat of trade sanction from Germany (then the world leader in chemical and pharmaceutical technologies) in retaliation to the Swiss use of its chemical and pharmaceutical inventions, a patent law worth its name came into being.

However, even the 1907 patent law had many exclusions, especially the refusal to grant patents to chemical substances (as opposed to chemical processes). It was only in 1954 that the Swiss patent law became comparable to those of other developed countries (Schiff, 1971), although chemical substances remained unpatentable until 1978 (Patel, 1989, p. 980).

The absence of the patent law also contributed to attracting FDI into Switzerland in industries like food processing, where firms wanting to produce patented products came to set up production facilities (Schiff, 1971, pp. 102-3).

The Dutch case is even more interesting. The Netherlands actually had introduced a patent law relatively early in 1817 (the earliest patent laws were established in the 1790s), but abolished it in 1869 on the ground that patents are artificially created monopolies that are not compatible with its free-trade principle.[16] In the Dutch case, Philips is the best known beneficiary of this patentless regime, having been established in 1899 and grown by manufacturing light bulbs, whose patents were held by Thomas Edison.

Despite the absence of the patent law, Switzerland and the Netherlands during the 'patentless' period were technologically innovative and dynamic (Schiff, 1971). Together with the generally lax IPR regimes of other rich countries at the time, their examples provide us with food for thought regarding the reform of the international patent and other IPR system in a way that helps today's developing countries absorb and master superior imported technologies (Chang, 2001; Chang, 2007, ch. 6).

[16] This shows how the Dutch during the period were much more consistent than free-trade economists of today, most of whom do not see any contradiction between their advocacy of unrestrained competition for trade in goods and services but socially regulated monopoly for trade in ideas.

4. Corporate Governance and the Concentration of Economic Power

4.1. Sweden: The Wallenbergs and the 15 Families

Sweden is by any standard one of the most equitable societies in the world. However, it has arguably the largest (in proportional terms) concentration of corporate power in the world, in the form of the Wallenberg family.

According to various estimates, the Wallenberg companies employed one in seven or eight industrial workers as of the 1960s (Magnusson, 2000, p. 217), indirectly controlled 1/3 of GDP as of the late 1980s (Burton, 1990), and controlled more than 42% of the stock exchange as of 1998 (Agnblad et al., 2001, p. 244) – staggering figures by any standard.

They control these enterprises through three family foundations that control the holding company, Investor, and a bank (SE-Banken) (Agnblad et al. 2001). Virtually all major Swedish household names, except for Volvo, are Wallenberg companies – Saab-Scania (aircraft and trucks), Ericsson (telephone), ABB (formerly ASEA, engineering), Syngenta (formerly Astra, pharmaceuticals), Stora Enso (formerly Stora; paper and pulp), SKF (bearings), and Electrolux (household goods), and SAS (airlines), just to name the most famous ones.

Even more interestingly, the Wallenbergs are not unique, although their dominance is unparalleled. They are one of the '15 families' that used to dominate the Swedish economy – Wallenberg, Söderberg, Wehtje, Bonnier, Johnson, Sachs, Kempe, Åhléns, Klingspor, Throne-Holst, Jacobsson, Åselius, Schwartz, Jeansson-Högberg-Hain, Roos, Dunker, Hammarskjöld, Broström and Wenner-Gren (Magnusson, 2000, p. 220). Since the 1980s, the talk was increasingly about the '10 families', as some of them (e.g., Wenner-Gren) declined (Magnusson, 2000, pp. 220-1), but it is clear that the Wallenbergs are not alone.

This is striking. We often hear about problems of elite entrenchment in developing countries – the '22 families' of Pakistan being the most frequently-mentioned example. Concentrated economic power is supposed not only to create an unequal society but also prevent economic development by blocking structural change. Then how did Sweden, with its '15 families', and especially the dominance of the Wallenberg family, manage to avoid this fate?

One part of the answer seems to be in the nature of the social pact that was struck in the 1930s, where the workers accepted the existence of large corporate power in return for the capitalists' acceptance of high-tax welfare state and full employment. On top of that, the self-restraint in personal life exercised by the Wallenbergs (we do not have information on other families) seem to have also mattered. For example, 1998 magazine article estimated the combined personal fortunes of Jacob and Marcus Wallenberg, the then two 'new generation' leaders of the family business empire, to be only $15 million (Madslien, 1998). Through the family foundations, it has donated a lot of money to science and research (Tjerneld, 1969, p. 101).

Obviously these practices by the Wallenberg family, being culturally and politically context-dependent, need to be properly 'translated' into the local context if we are to transfer them to other countries. However, they at least tell today's developing countries that they can build an equitable society even if they do not destroy the top business families.

4.2. Denmark: The Maersk Family

Even less well known and even more difficult to understand than the dominance of the Wallenberg family in Sweden is the dominance of the Maersk-Møller family of the Maersk Group in Denmark. There is very little written in English on its role.

According to a Danish source, it was only in 2003 that the Danish Statistical Agency first calculated the contributions of the Maersk group (Benson et al., 2007, p. 477). According to these estimates, its turn-over was 157 billion kroner, when the Danish GDP was 1,400 billion. Of course, turnovers and GDP are not strictly comparable, as the latter are value-added figures. The Agency estimated Maersk's contribution to total production at 7.2%. Its employment was estimated to be around 3.3% of total employment.

While its economic importance is much less than that of the Wallenberg companies, the Maersk group has been even more closely and, more importantly, far less transparently tied into the Danish state. According to Benson et al. (2007), the state subsidies it got on the Lindø shipyard construction are very large and decided through quite opaque processes. The concessions that it got on the offshore oil fields were even greater and even less transparent.

This sits uncomfortably with the widespread perception of Denmark as an egalitarian, 'clean', and transparent society. How do we account for this? Does it mean that the Danes are simply keeping quiet (at least to the outside world) about their 'dark side'? Or is there some mechanism through which the Danish state's relationship with the Maersk group is legitimized? If the latter, may today's developing countries be able to construct an egalitarian and 'clean' society without having to completely change the structure of power and privilege in the top echelon of their societies? These are some questions whose answers will be very helpful for today's developing countries.

5. Social and Political Factors

According to today's orthodoxy, any form of social and political division – ethno-liguistic, religious, ideological – is detrimental for development – it can cause civil wars and other violent conflicts, destabilizing the economy. Even when there are peaceful power-sharing arrangements, it is likely to cause rent-seeking, inefficiencies due to duplication of efforts, and corruption to buy off opposition. However, many SRECs have managed to build prosperous economies despite their divisions.

5.1. Belgium: Two –and-half Languages

Belgium has two linguistic groups – the French-speakers (the Wallonians, who account for about 40% of the population) and the Dutch-speakers (the Flemings, who account for about 59%) – or three, if you count the tiny group of German-speakers (around 0.6% of the population).[17] In the 19th century, the French-speaking elite treated the Flemings as second-class citizens. After World War II, the enmity between the two groups became intensified, and Belgium was changed from a unitary state to a federal state in a series of constitutional reforms in the 1970s and the 1980s. Even the main political parties – the Liberals, the Christian Democrats, and the Socialists – are

[17] The information on the Belgian ethno-linguistic make-up is from http://en.wikipedia.org/wiki/Belgium.

split into distinct ethno-linguistic groups. Few countries have more explicit inter-ethnic power-sharing arrangements.

Despite all this, Belgium has survived nearly two centuries of deep ethno-linguistic division and economically prospered. How has this been possible? In particular, how has its explicit ethnic power-sharing arrangement not resulted in political paralysis (albeit not without some gridlocks) or, alternatively, huge inefficiencies and corruption? Answers to these questions would be useful for those developing countries that suffer from ethnic divisions.

5.2. Switzerland: Three-and-half Languages and Two Religions

If anything, Switzerland should be in an even bigger mess than Belgium. Instead of three ethno-linguistic groups, it has four – the German-speakers (73% of resident citizens), the French-speakers (21%), the Italian-speakers (4%), and the Romansh-speakers (about 0.6%).[18] Unlike Belgium, where Catholicism is dominant (although it is constitutionally a secular state), Switzerland is divided between the Catholics (41%) and the Protestants (43%).[19]

One interesting thing is that, unlike in Belgium, linguistic division was never a major issue in Switzerland. On the other hand, religious division was a very divisive issue, although not in a totally straightforward way. Since the Reformation in the 16th century, the country experienced a series of religious conflicts, especially the Battles of Villmergen in 1656 and 1712. In 1847, it even experienced a full-scale (albeit short) civil war (Sonderbundkrieg). The war was started because seven conservative Catholic cantons (Lucerne, Fribourg, Valais, Uri, Schwyz, Unterwalden and Zug) formed an alliance (against the 1815 constitution banning all internal alliances) and rose against the persecution of the Catholic Church.[20] All the other Cantons, including other Catholic ones, except two (except Neuchâtel and Appenzell Innerrhoden, which remained neutral) fought against the Sonderbund cantons (therefore, the religious division was not 'straightforward' Catholic-Protestant divide). The latter were defeated and a new constitution was adopted in 1848 to end the almost-near independence of cantons and create a proper federal state (David & Mach, 2007, p. 227).

Compared to those in Belgium, conflicts between different groups in Switzerland were more open and violent. Unlike in the Belgian case, where the ethno-linguistic division has recently deepened, the basic structure of Switzerland's 1848 constitution, which does not have any explicit power-sharing arrangements among linguistic or religious groups, has been maintained. How was this possible? Decentralization of power at the cantonal level may have helped, but that cannot necessarily be the right explanation, given that internal conflicts in Switzerland were more severe in the days when the country was more decentralized.

5.3. Finland: Bloody Civil War and Anti-Communism

[18] The information on the Swiss ethno-linguistic make-up is from http://en.wikipedia.org/wiki/Switzerland

[19] The information on the Swiss religious make-up is from http://en.wikipedia.org/wiki/Switzerland

[20] Some liberal Catholic cantons such as Ticino and Solothurn did not participate.

Finland was a Swedish colony for over 600 years (c. 1150-1809), before it was taken by Russia for another 100 years or so (1809-1917), until it gained independence in 1918.

The Swedish colonial history left a sizeable Swedish-speaking minority (now around 5% of the population, but it used to be over 10% even until the 1920s). Immediately after the independence, the overwhelmingly Swedish-speaking Åland Islands wanted to join Sweden, creating an international dispute (where the League of Nations ruled in favour of Finland). Åland stayed after (grudgingly) accepting the 'autonomous province' status.

The independence from Russia was followed by a bitter Civil War, where close to 40,000 people perished in a country with the then population of around three million. The Civil War left a bitter legacy. The victorious right deprived the Communists of voting rights until 1944. The strong anti-Communist feeling that developed in the ruling circles following the Civil War led Finland into the arms of Nazi Germany, whose defeat meant that Finland had to cede some territory to the USSR, reject the Marshall Aid, and pay very heavy war reparation to the USSR, which crippled the Finnish economy throughout the 1950s.

Thus, the recent history of Finland seems as turbulent as that of most developing countries today that are supposed to be failing because of ethnic, religious, and ideological divisions. How has Finland built a peaceful and consensual society out of this unpromising background?

5.4. Sweden: Not So United

Although it was Norway that pioneered social pact in the form of the Basic Agreement in 1935, probably the best-known and arguably the most successful one is Sweden's Saltsjöbaden Agreement of 1938.

Given that Sweden is ethno-linguistically and religiously very homogeneous (the Finnish speakers, about 3% of the population, are the only numerically significant linguistic minority and the Lutheran Church has dominated the country), people think that social compromise in Sweden was 'easy'.[21]

However, this is not true. In the 1920s, Sweden was one of the most conflict-ridden societies in the world – it had the worst industrial relations in the world, measured in terms of the number of days lost in industrial disputes (Korpi, 1983). This is not a big surprise when we consider that that it had a radical socialist union and a very rightwing capitalist class – a capitalist class so rightwing that it refused to accept income tax until 1932, when Britain introduced it nearly a century ago (1842) and even when the famously anti-tax US introduced it nearly 20 years ago (1913).

Being most Swedish-speaking and Lutheran did not make the Swedes all alike and therefore prone to compromise. It was actually exactly out of the crucible of intense conflicts that they have forged a durable social pact. Developing countries can learn a lot from the Swedish experience in figuring out how to reach a durable compromise in a society that seemingly is unable to compromise.

6. Concluding Remarks

[21]The information on the Swedish ethno-linguistic make-up is from http://en.wikipedia.org/wiki/Sweden

My paper has reviewed several aspects of the history of the SRECs that I think have particular relevance for today's developing countries – agricultural research, extension and education (the Netherlands), agricultural co-ops (Denmark), industrial development (Belgium, Switzerland), SOEs and state investment funds (Austria), patents (the Netherlands, Switzerland), concentration of corporate power (Sweden, Denmark), and social and political divisions (Belgium, Switzerland, Finland, and Sweden). I could have also reviewed issues like public-private partnership (Sweden) and natural resource abundance (Norway, Finland, and Sweden), but I did not have the space to do that.

It is not easy to draw firm lessons from a wide range of countries, especially when there are some crucial information gaps. However, the following points may be made.

First of all, the history of the SRECs clearly shows that the SRECs have not developed because things were 'easy' for them. They started with many of the constraints that are supposedly holding today's developing countries back – small size of the domestic market, ethnic divisions, religious divisions, ideological divisions, unpromising geography, history of internal conflicts, huge concentration of economic power, and even colonial history (Finland and, to a lesser extent Belgium). Of course this is not to deny that many of today's developing countries are labouring under even less promising conditions – more brutal colonial history, often less promising geographical conditions, and the much bigger technological gap that now exists in relation to the 'frontier' countries. However, the history of the SRECs reminds us that successful countries develop *despite* poor initial conditions. To paraphrase Karl Mars, it is humans that make history, although not in the context of their own choosing.

Second, the history of the SRECs shows us the importance of public policy intervention in promoting development. In many countries, effective state intervention was crucial in kick-starting and managing the developmental process. Important examples include: government support for agricultural research, extension, and education in the Netherlands; state ownership and investment subsidies in the post-WWII period in Austria; strict government control of FDI in Finland; encouragement of agricultural co-ops and support for export marketing by the Danish state; the deliberate tailoring of patent policy to national developmental needs in Switzerland. Of course, these experiences need to be studied more carefully, if we are to extract more practical lessons from them.

Third, while showing the importance of public policy intervention, the history of the SRECs also shows that successful public policy intervention needs pragmatism and flexibility. The Belgian state shifted between interventionism and liberalism across different periods, according to the prevailing needs of the economy. The Dutch government was willing to (as least partially) cede control over public initiatives in agriculture, while also taking over (at least partially) private initiatives when necessary. The Swedish and the Danish states, despite their generally social-democratic leanings, were pragmatic enough to work closely (perhaps too closely in some opinion) with large business groups.

I hope the paper has shown that there are lots of very interesting lessons that today's developing countries can potentially draw from the SRECs. Needless to say, I am not an expert on any of the countries reviewed, so I could only scratch the surface. In some cases, I feel that I've mostly asked questions rather than giving any useful answer. However, I hope I have at least drawn people's attention to some potentially useful issues that have not been noticed by outside narrow circles (and certainly not among those who work on economic development). If some experts on these

countries are prompted into looking into the issues raised here with a view to drawing more concrete lessons for today's developing countries, the purpose of the paper will have well been served.

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