

UBS Investment Research

Global Economic Perspectives

Can Japan compete?

■ The age of diminished globalisation

The moderation of Japan's trade balance with the rest of the world has raised questions about the competitiveness of Japanese industry, and whether the export sector can provide a stimulus to Japan's economy. This is taking place as the world experiences rising protectionist fears in the field of trade globalisation, and a clear diminution in capital account globalisation.

■ Japan's globalisation

The model of Japanese globalisation in many ways harkens back to that which prevailed in the early twentieth century. Japan has exported finished products from Japan with relative success. Japan's export share of GDP continues to exceed that of the United States, for instance. However, Japan has lagged behind the developed economies and global trends in the transnational model of globalisation – companies which operate out of multiple locations, maximising their efficiency through global diversification. Only six of the world's top transnational companies are Japanese, and both the stock and flow of Japanese foreign direct investment lags behind that of the rest of the OECD.

■ Vulnerabilities

Japan's greater focus on traditional export models rather than transnational corporate trade renders it vulnerable to protectionist challenges, at a time when global trade has already exhibited some volatility.

■ Competitive advantages and disadvantages

Japan does have some competitive advantages. Japanese corporates have already weathered the shock of a banking system that has partially disintermediated from the economy. Japanese corporates have also had to adapt to an ageing society, and are now adapting to an energy shock. In these areas, Japan's challenges have predated those that have hit (or in the case of energy which are likely to hit) the rest of the global economy. Japan has had "first mover advantage" in adapting to more challenging circumstances that now present themselves to the rest of the world. However, Japan still has to face up to the challenge of encouraging innovation, reviving the small business sector, and encouraging the diversity in management that will stimulate new ideas.

5 October 2012

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This Global Economic Perspectives forms the basis of a speech to be delivered at the Nikkei Global Management Forum on 11 October 2012.

Japan's position in the global economy has been eroded by over two decades of relative growth underperformance. To this we must now add the fact that the trade balance of Japan has swung into deficit in recent months, raising questions about whether Japan can compete in the modern world. Is globalisation something that can save Japan, or will globalisation be a force for irreparable harm? More importantly, perhaps, what does Japan need to do to enhance its competitiveness, and hopefully to reverse the economic weakness of recent years?

What is globalisation?

It is well to start by defining terms. Globalisation is often bandied about as a political and an economic concept, but it is not often that the meaning is considered. This is unfortunate, for the nature of globalisation is important. Globalisation can refer to simply expanding trade, with companies (in this case, Japanese companies) exporting their goods and services across the globe. This can be thought of as the pattern of globalisation evidenced in the early twentieth century; raw materials are imported, converted into finished product, and that finished product is then exported. It could be labelled the "imperial" model of trade, and indeed it coincided with the age of Empires (with colonies supplying raw materials to manufacturing imperial powers).

Globalisation can also mean the creation of global companies – private entities that have multiple production facilities in multiple countries. Such companies (generally glorying in the name of "transnational corporations") locate production in the most productive location possible. They engage in global trade out of necessity – as their production chains (and the supply chains that service their production chains) do not stop at international borders. This is the globalisation of the last twenty years. Today a third of global trade is not between countries at all – at least not in the sense of the early twentieth century imperial trade model. A third of global trade is trade that takes place within companies – subsidiaries shuffling goods amongst themselves, and not dealing with customers at all. Including intra-company trade, over half of all global trade is trade in components – part of the supply chain of companies that trade across borders.

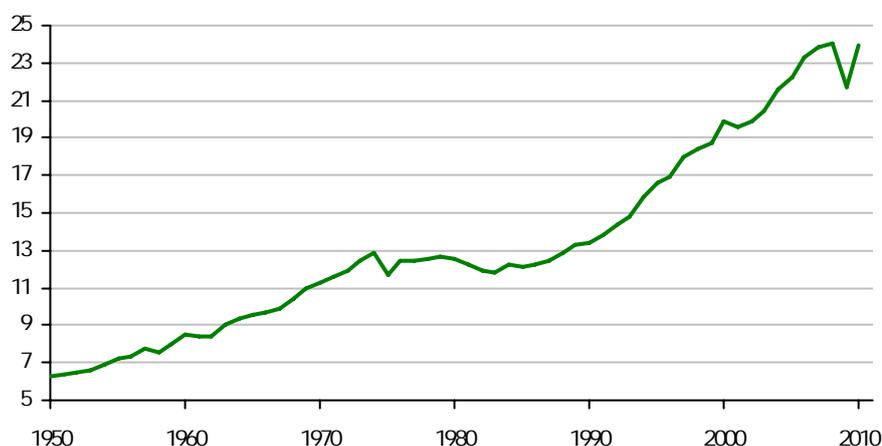
The final aspect of globalisation we should consider is not trade at all. We tend to think of globalisation in terms of the current account – trade and the profit that arises from it. However, the most impressive development in globalisation over the past two decades is arguably the globalisation of capital. In some ways this is a direct consequence of the trade globalisation (becoming a transnational corporate requires direct investment in overseas locations, or alternatively the acquisition of overseas companies). But capital globalisation went beyond the needs of expanding corporations. Capital diversification has been the mantra of most developed economies since the early 1990s, and has played a critical role in furthering growth in emerging economies too.

Japan in a less global world

The global financial crisis is arguably the most significant structural break in the world economy since the changes of 1971 to 1975. The world of the next two decades is unlikely to resemble that of the past two decades. Globalisation, in particular, seems likely to be challenged.

Trade globalisation has already been challenged, if the following chart is to be believed. Global trade share of GDP basically doubled from 1990 to 2007, before experiencing the largest drop that we have seen in modern economic history with the onset of the global financial crisis. However, the transition from imperial to the transnational form of trade exaggerates the impact of any decline in global trade volumes relative to GDP. GDP calculates the final economic value of goods sold. Thus, purchasing a washing machine will increase global GDP by the price paid for the washing machine. Assuming that the washing machine is imported (and nearly all the world's washing machines are made in China), the value of global trade will reflect the import price of the washing machine. However, if the washing machine manufacturer imported steel, microchips, and plastics to manufacture the machine, then the value of global trade will also include these transactions in the aggregation. If consumers reduce their demand by one washing machine, then the value of global GDP falls by the value of one washing machine. However, the value of global trade falls by the import value of one washing machine, *plus* the import value of steel, *plus* the import value of microchips, *plus* the import value of plastics. In a world of transnational globalisation, a decline in economic activity will automatically affect trade more than it will affect GDP.

Global trade as a proportion of global GDP



Source: WTO, UBS

It is clear that the years of the global financial crisis have impacted the value of trade, and we would suggest that there has been some kind of structural break. However, we do not have to imagine ourselves in a 1930s style trade collapse on the basis of this chart. While trade protectionism has crept into the world economy in recent years, few governments see any advantage in putting trade restrictions on vital components that form part of local companies' supply chains. That implies that perhaps 60% to 70% of world trade should be largely immune from protection (being trade in commodities, trade in components, and

intra-company trade). Where trade does still follow the imperial model, however, protectionism is a growing concern. The trade restrictions that have been put in place in developed economies have tended to focus on finished products that are imported, and which are in direct competition to domestic firms (car tyres and textiles imports into the US and the EU respectively being two of the more obvious examples in the post crisis environment).

The result is that we are far more likely to witness a stabilisation of trade than a decline. Protectionism limits or reverses the element of trade following the imperial model, with transnational trade largely unaffected. However, even a stabilisation of trade as a share of the world economy, in the manner of the later 1970s, for instance, is a major change from where we have been.

More worrying, perhaps, is the threat to the globalisation of capital that has arisen in the wake of the global financial crisis. Here, globalisation does seem to be in reverse. We can see a decline in capital flow trends in recent years. Reports of reduced volumes in markets are prevalent, and reflect in part a decline in international investment volumes. The collapse of trade finance in 2009 did not last, fortunately, but we are in no way back to pre crisis levels. Government debt levels are crowding out private capital in a new way, as banks and institutions are encouraged to support home bond markets rather than seeking to maximise returns with geographically diverse portfolios. The unintended consequences of government policies reinforce this home country bias. In the UK the Bank of England has launched its funding for lending program, for instance. This is a policy with the laudable aim of fostering lending by British banks to small businesses. It is, of course, aimed at furthering bank lending to British small businesses. This is, in effect, a capital control – the flow of British capital is skewed to the domestic market.

Overseas investments by the US, Japan, UK and Euro area (and trend)



Source: Haver, UBS

How are Japanese companies likely to fare in this environment?

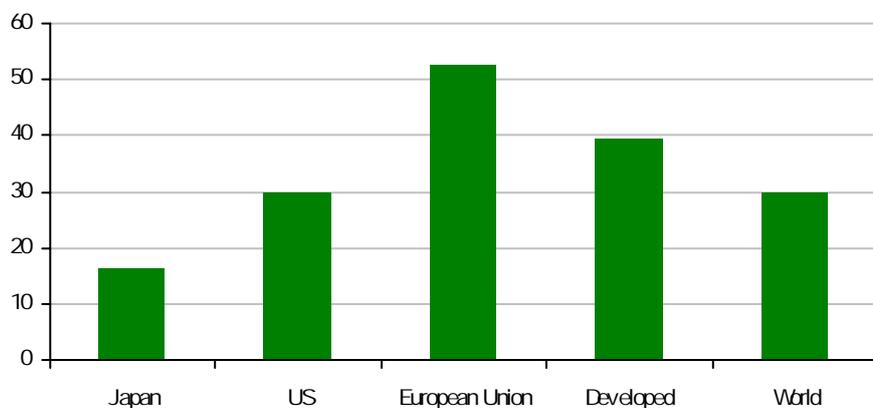
If the post crisis world is characterised by stable trade globalisation, and a decline in capital globalisation, how will Japanese companies fare? The initial signs are not good. Japan has but six of the top one hundred transnational non

financial companies in the world. Three of those companies – Toyota, Honda, and Nissan – lie in one industry.

It is also perhaps worth noting that five of the six successful Japanese transnational companies could be considered to be mavericks in Japanese society. The auto companies developed outside of government guidance, and of course Sony's unconventional business approach (by Japanese standards) has become almost business folklore. The list of transnational Japanese companies does not suggest that government policy has been especially successful in the promotion of globalisation.

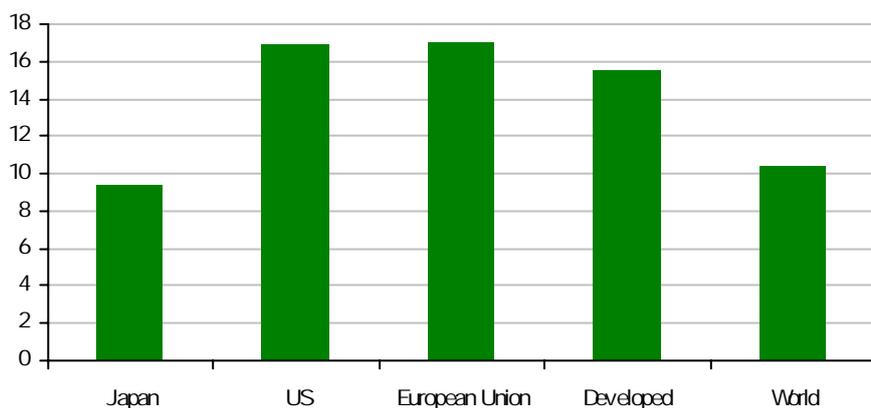
Moreover, Japan's foreign direct investment pattern reveals a country that is far more introspective than most of the rest of the developed world. Both the flow of FDI as a share of overall investment and the stock of FDI as a proportion of GDP reveal a country that has less global exposure in a transnational sense than its peers. Of course this model does not preclude the imperial style of globalisation from taking place – companies do not have to have overseas operations to export under that model. This perhaps helps to explain Japan's ability to export at a level of GDP that is comparable to many other OECD countries without having the same global presence. Japan has, perhaps, a higher proportion of imperial globalisation in its global trading patterns than do many other OECD economies (the United States, for instance). As outlined above, however, it is the imperial model of trade that is most vulnerable to the threat of protectionism.

Stock of outward FDI, as a % of domestic GDP



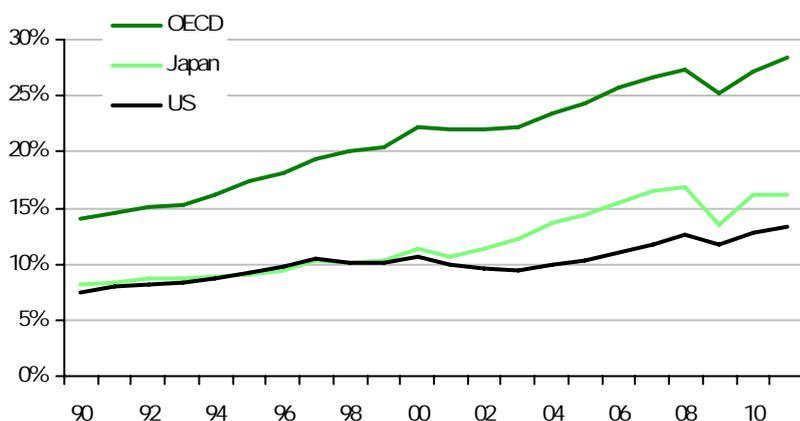
Source: WTO, UBS

Flow of FDI as % Gross Domestic Capital Formation



Source: WTO, UBS

Exports as a share of GDP



Source: OECD, UBS

The yen

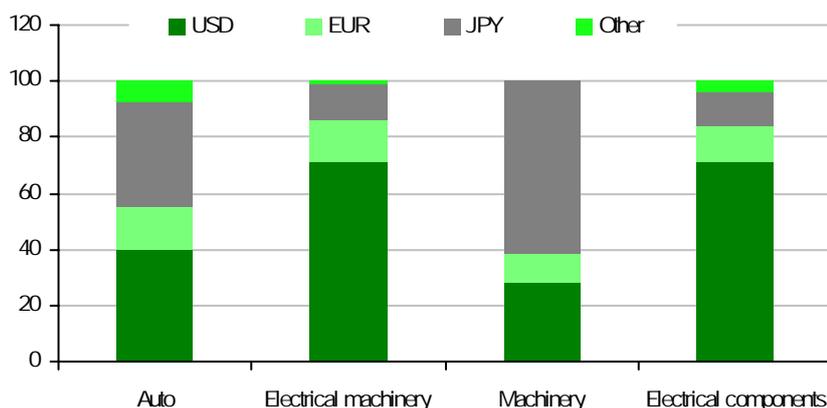
For a global economist, perhaps one of the most frustrating aspects on the debate about competitiveness and Japan is the obsession with currency values. This is no doubt a legacy of the Plaza and Louvre accords and the consequences of currency moves on monetary policy in Japan in the late 1980s. We think it is, however, a shame that the debate about competitiveness is all too often in thrall to events of nearly thirty years ago. If we are in a world of transnational globalisation rather than imperial globalisation, then currency should not be viewed as critical for competitiveness. It may be going too far to say that currencies are irrelevant to trade competitiveness, but they are certainly not nearly as important as is commonly supposed.

We see two reasons Japan should stop worrying about the movements of the yen (within reasonable bounds). First, the overwhelming evidence is that large companies will price to market. That is to say, currency fluctuations do not change the foreign currency price of exports. A Japanese company selling to the United States will not change their price by 10% just because dollar-yen has moved by 10%. On the contrary, the evidence of import price shifts is that a

Japanese company will keep its price stable in dollar terms and absorb any adverse currency moves through cost discipline in other areas (or of course experience some squeeze on its profits). Companies therefore should maintain market share, even as currencies fluctuate. The only exception to this is commodity prices, which do tend to respond to currency moves. As Japan is not a commodity producer, this point is not especially important, however.

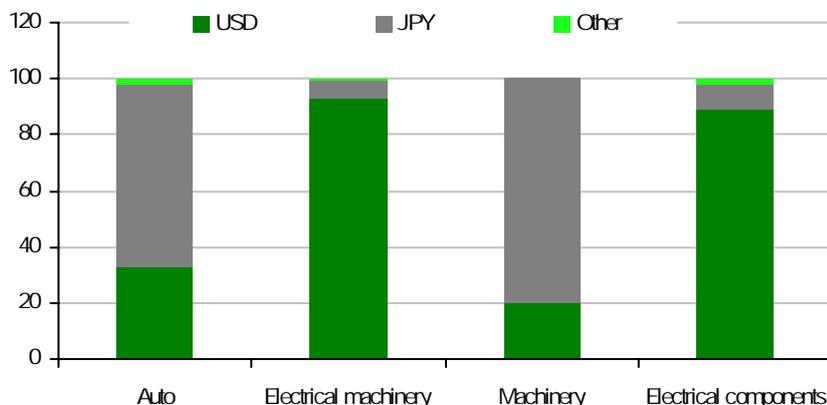
The concept of pricing to market reducing the role of currencies is reinforced by the second fact; Japanese exporters increasingly do not sell in foreign currency. The prevalence of invoicing in yen has increased in recent years, and for exports to Asia a majority of goods sold are yen invoiced. This fits with the transnational model of globalisation. Why should a company invoice its subsidiaries in a currency other than the yen? Indeed, if the subsidiary has more flexibility in its costs – in labour costs, for instance – it makes sense for the subsidiary rather than the parent Japanese company to bear the risk of foreign exchange fluctuations. The subsidiary is better able to offset adverse currency moves with flexibility in other costs.

When Japanese firms invoice the world, what currency do they use?



Source: Ito, Koibuchi, Sato & Shimizu (2010)

When Japanese firms invoice Asia, what currency do they use?

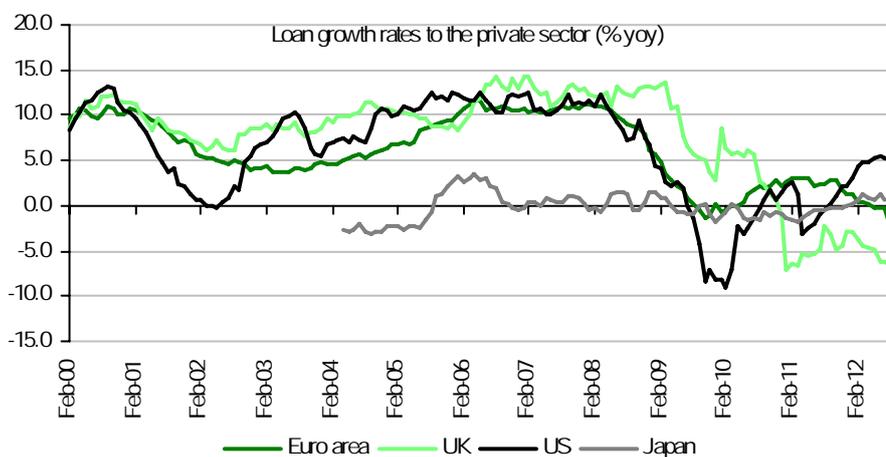


Source: Ito, Koibuchi, Sato & Shimizu (2010)

Where does Japan hold a competitive advantage?

While it may seem perverse to argue it, Japan's competitive advantage in the world lies in its banks, its demographics, and its access to energy. The first indication we have of this competitive advantage is the fact that nowadays the most common question from investors that relates to Japan is something along the lines of "Is Europe or is America the twenty first century Japan?". The global financial credit crunch has a precedent in the credit and banking experiences of Japan over the past twenty years. It would be hard for us to argue that Japanese policy has always dealt successfully with its banking problems over the past two decades. However, Japanese companies have had to adjust to a world with lower bank lending and greater obstacles to obtaining bank funding. Those companies that have managed to be successful in this environment have done so in spite of a more limited Japanese financial system.

Bank lending growth to the private sector – does Japan's experience resonate?

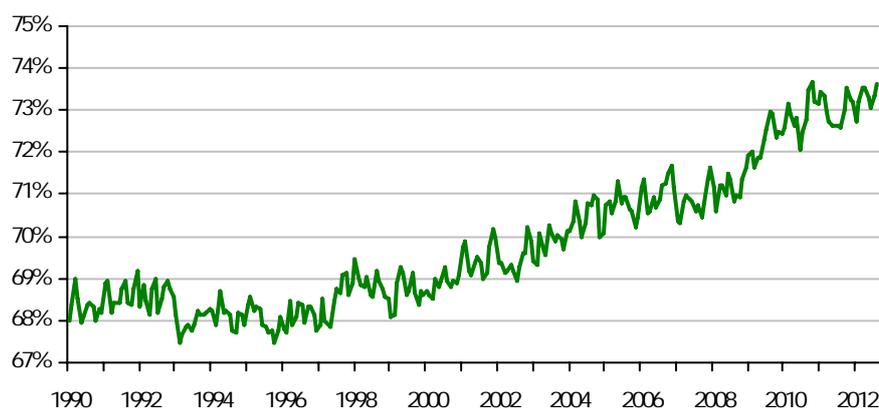


Source: Haver, UBS

These bank lending constraints are now visibly at work elsewhere in the OECD. Japan's competitive advantage is that it got there first, and its successful companies adapted to survive. The global financial system is unlikely to mimic the experiences of Japan exactly, in part because other countries have tried to learn from Japan's own experiences. From a competitiveness perspective, as the globalisation of capital weakens and access to domestic capital becomes more difficult, the advantage for Japanese companies is that they know what they are doing.

A similar advantage lies with Japan's demographics. We all know that Japan has aged over the past twenty years. We also know that many other countries, in both Europe and Asia, now face a similar ageing in their societies. How does a company manage to stay competitive with a decline in access to younger staff, and indeed with a shrinking local workforce? Japanese companies have been wrestling with this challenge for a number of years, and we can see how this has changed society in Japan.

Female employment as proportion of male employment in Japan



Source: Haver

The rise in female employment coupled with an increase in older workers in Japan is a model that other countries are striving to follow. Europe, for instance, is changing retirement ages in the face of its demographic crisis. China needs to contemplate what it will mean to have a declining population, and the loss of the plentiful, cheap, young labour that has been so important to its economic model in recent years. It takes time to change a corporate culture, and to lose inbuilt prejudice (about women in the workforce, or about older workers). Japanese corporations have been forced to adapt by circumstances, and while the culture of the Japanese corporate may have to change further, Japan has something of a head start in this regard.

The final area of competitive advantage for Japan lies in the problem of energy supply. Japan is of course facing up to an energy shortage. While energy is not a limiting factor on growth elsewhere in the world, it is an environmental fact that existing energy sources are not finite. The world is facing not just a financial credit crunch; it is also in the early stages of an environmental credit crunch. We all know what the responses to this have to be. Either the world has to find alternative sources of energy, or it has to become more efficient in its use of energy, or preferably both.

The competitive advantage Japan has is that Japanese companies must find ways to adapt to energy constrained circumstances *now*, perhaps a decade or more ahead of the rest of the OECD. This has two implications. Japanese companies need to find more energy efficient means of production. Ideally, at least for the domestic market, Japanese companies need to produce goods that are themselves more energy efficient in their operation. Of course, other countries are facing energy constraints that will grow over time, but in Japan the search for energy efficiency is far more urgent. That efficiency imperative has the potential to give Japanese corporations an international advantage. In ten years time, will global consumers want to buy a car or an air conditioning unit that has been made in the United States, or made in Japan? With the desire for energy efficiency only likely to grow, it seems that the Japanese corporate could have the competitive edge.

The obstacles to Japanese competitiveness

While Japan's experiences in the past twenty years give them some advance warning of challenges that are being repeated at a global level today, it is clear that being the first to experience such difficulties cannot grant competitiveness alone. There are three interrelated areas that challenge the ability of Japan to develop global competitiveness.

In a world where the transnational model of globalisation seems the most likely to succeed, the corporate that is competitive is not necessarily the corporate that manufactures cheaply. The return on education and innovation has been increasing. It is the corporate that innovates that is the most likely to do well. The oft told anecdote of an Apple iPad, made in China, but with the overwhelming proportion of profits going to America (as the inventor and innovator) is a salutatory lesson.

Economists are capable of debating the sources of innovation with almost endless patience. There are some certain ground rules, of course. Rule of law and the ability to benefit from the fruits of innovation are important, and of course Japan has these benefits. This is not something we should overlook – the challenge for an economy like China, if it wishes to progress from manufacturer to inventor, is how to establish such legal protection. Innovation also requires a challenge to the status quo, however. New ideas necessarily require one to refuse to accept existing practice, and to be able to challenge the existing way of doing things without fear of reprisal (or with no more reprisal than a bankruptcy court can threaten). In this, Japan's education system still seems to lag behind. Of course, there have been changes in Japan's education system, most notably over a quarter of a century ago, but still today University of Tokyo ranks either 20th or 30th in the world (depending on the survey that one looks at). The research innovation that offers opportunity to an economy seems to be less advanced in Japanese academia.

Associated with this is the relatively low instance of small businesses as a share of Japanese GDP. In a transnational global environment it may sound odd to be lauding the attributes of small businesses, but such companies are naturally inclined to innovate. While such businesses are unlikely to be transnational companies themselves, they can either be absorbed into transnational companies, spur transnational companies to compete, or on occasion grow into transnational companies over time. While other OECD countries typically have around 60% of private sector GDP being generated by the small and medium sized enterprise sector, in Japan this proportion is lower (although the contribution to goods sales is somewhat higher). In part this may be a legacy of the keiretsu structures of the last century, coupled with the problems of the banking system. Whatever the cause, it has implications for future innovation.

The final problem in developing innovation and indeed a transnational global culture in Japan is the homogeneity of Japanese corporate management. There is a direct correlation between diversity and economic success in the modern age. While a correlation does not equate to causation, in an environment where the return to human capital is growing it is important that (at the very least) no one is excluded by reason of gender, nationality, race or any other label.

So what is the future for Japan?

A world that is less globalised, and where transnational globalisation rather than imperial globalisation is the most likely survivor, does not necessarily seem to work to Japan's advantage. However, Japan has faced up to challenges which give it a competitive advantage, as long as it can learn from those challenges. In our view, corporate success in a transnational world economy will not depend on Japan losing its identity and transforming into a bland, global nonentity. Rather it must be that Japan allows other cultures to coexist and interact with its own culture to generate a variety that the world wants to know more of.

Both the nineteenth and twentieth centuries have demonstrated that Japan is more than capable of great change, and adapting its own structures in a changing world environment. There is no reason to suppose that Japan cannot adapt again in the twenty first century. Equally, however, there is no certainty of change. The world economy is in the midst of profound structural change. It is up to Japan as to whether that works for good or ill for its corporate sector.

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