Is revaluation of the renminbi good news?

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Exchange rate reform and prospects for RMB revaluation

On July 21 China announced its first step towards floating the renminbi (RMB). It is clear why China saw this as the right time: not only is current economic performance strong, as illustrated by second quarter GDP growth of 9.5 percent reported just ahead of the revaluation, but even the risk factors that were causing concern in 2004, such as inflation and energy shortages, are now more subdued. The initial revaluation of 2 percent was modest and this will have only minor repercussions on economic forecasts and global trade. What is less clear is how much the currency will be permitted to revalue over the next couple of years and what impact this might have on China's surging exports and its balance of payments.

The move to a managed float against a basket of currencies leaves China with more scope for flexibility than it had under its previous dollar peg. Instead of managing the currency in a very tight band around the prevailing RMB/dollar rate, the RMB is now fixed against the basket, with a \pm 0.3 percent daily fluctuation band. The basket is reported to include not only substantial weights on the US dollar, the yen and the euro, as expected, but also a large weighting on the Korean won and lesser weightings on a range of other currencies.

However, it is not yet known how much flexibility will actually be permitted under the managed float. One obvious reason for this is that the weights for the currency basket are unknown, although inevitably the weight on the US dollar will be high. An explicit US dollar weight of 30 to 40 percent is seen as a plausible estimate but the implicit weight may be higher given the tendency for a number of currencies to closely track the dollar.

In terms of speed of adjustment, the currency could move by as much as 1 to 1.5 percent per week, in theory, if the daily central rate against the basket were to be reset at the upper limit of the \pm 0.3 percent band each day. And if all other currencies were to revalue by, say, 10 percent against the US dollar, then China should, in principle, follow the basket so that the RMB/dollar cross rate would also revalue by about 5 to 7 percent. We simply do not know at this stage but the process will probably be evolutionary, allowing China time to set up appropriate financial systems, forward markets etc.

So far, there has been too little movement of the dollar against the major currencies to really test the operation of China's new regime. However, if such changes were to occur without China adjusting its dollar rate, this would prove very damaging to confidence in China's new policy and currency intentions. Indeed, if little change in the key RMB/dollar rate is seen over the next three months, disenchantment will set in. So further, modest, adjustments look likely, perhaps more if other currencies were also to rise against the dollar.

In order to assess the prospects for appreciation of the RMB, we have estimated two exchange indicators that point to the potential scale of revaluation:

- A FEER¹ type model for assessing the underlying "fair value" for the exchange rate benchmarked on the basis of the currency being close to equilibrium in 2000 to 2001, which marked the watershed between the period in the late 1990s when many expected a devaluation and the first rumblings about revaluation after WTO entry. Taking a fairly broad view over 2001 to 2010, this suggests an equilibrium rate in the range 5.5 to 7 versus the US dollar.
- A basket float estimated using plausible weights on the basket currencies. Firstly, we estimate the predicted path for the RMB had China floated on entry to the WTO at the end of 2001. Secondly, for the forecast period, the estimates depend, of



More flexibility, but little movement to date

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¹ Fundamental equilibrium exchange rate.

Figure 1



course, on the projections adopted for other currencies: here we assume that the US dollar weakens by 5 to 10 percent against both the Yen and Euro over the next year.

Along with many forecasters, we estimate that the RMB may be considered to be around 15 to 20 percent undervalued. Projections made using the basket float method are fairly close to the FEER estimate over the longer run – given anticipated strength in other currencies, especially in Asia. On the basis of these indicators, we may therefore expect to see a steady move to around 7 RMB/US dollar by 2007, inline with the cautious, gradualist approach typical of Chinese policymakers.

Revaluation may have little impact on China's exports

The main reason for the intense interest in the Chinese currency is obvious: China's trade partners hope that revaluation will ease the pressure from China's booming export industries on the more exposed and fragile industries and jobs in the US and EU – for which China has become the latest and most serious in a long line of threats from low cost producers. Alarmist estimates, based on simply extrapolating recent high growth rates, point to a virtual takeover of world manufacturing by China. Such extrapolations exaggerate China's potential, as we will discuss later, but further gains in market share must be expected. Can revaluation make a significant difference to this outlook?

Although it is difficult to establish reliable econometric estimates for the impact of changes in com-

petitiveness on China's export performance, evidence from both Chinese statistics and other emerging market economies tends to point to this impact being fairly low compared with that estimated for OECD economies. The loss in export volumes that we would directly associate with a 20 percent appreciation would only be of the order of 4 to 5 percent in total, just slightly slowing Chinese export growth over a couple of years. In addition, only a small increase in China's dollar export prices is likely (as China

is widely believed to price to market for much of its trade), thus the overall loss in China's dollar exports linked to a 20 percent revaluation may be less than 3 percent. A larger export price rise might even push dollar exports up, so importers might pay more for a slightly lower volume of Chinese goods - but they might have to pay more if they were to switch sourcing to another trade partner or if they tried to supply the same goods from domestic producers. Because China's costs are so low in absolute terms, the incremental impact of a 20 percent revaluation probably means very little - although larger changes could imply that some production (e.g. for basic textiles and garments) starts to switch to even lower cost bases, perhaps in Vietnam or other undeveloped parts of SE Asia. Such moves away from producing in China would not benefit producers in the U.S. or EU, however.

Apart from having only a weak impact on China's exports, revaluation may also fail to provide much stimulus to China's imports. Many imports are input requirements linked to export production, which implies that these imports would weaken alongside exports. Imports linked to local demand should strengthen, provided Chinese consumers are not threatened by job losses that could cause a rise in precautionary savings. On balance, a 20 percent revaluation might cut China's current account surplus by some \$10 to 20 billion.

Overall, the changes we would expect from a 20 percent RMB revaluation are quite modest. This is not the key to turning around the US trade deficit – at least not if the RMB were to revalue alone. Coupled with Asia-wide revaluations, the impact on global trade and the US deficit is estimated to be much

Estimates suggest a further revaluation to around 7 RMB/US\$ by 2007 larger – possibly boosting US net trade by some \$100 billion over 2 to 3 years. But, ironically, this scenario might even turn out to be beneficial to China over 3 to 4 years as China would still be the most attractive, large low cost economy of Asia. OEF model based estimates predict a rapid recovery of China's exports and GDP in such a scenario.

The view that plausible RMB revaluations will easily "cure" recent trade trends is wide off the mark. Even an implausibly high revaluation of 100 percent or more would still leave China cost competitive and an attractive production base given both its export capability and the potential size of the undeveloped internal market. Model estimates suggest that revaluations of some 50 percent or more per annum might be required to sustain a reduction in China's export growth to zero. This is not a realistic scenario. More importantly, we should recognise that this would severely slow the expansion in world trade, with damaging consequences for longer-run trends in global productivity growth and inflation. As a means of addressing the US imbalances, or reducing the EU's unemployment rate, there is clearly a problem with this approach – a more appropriate view must be to consider the global picture for trade, consumption and savings flows, thus putting both the U.S.'s and EU's problems within a wider frame than simply bilateral trade disputes with China.

However, the estimated weak link between China's currency valuation and export growth also points to another issue: the drive behind China's export boom has not been due to improvements in cost competitiveness. Most of the rise in China's trade share has been due to its rapid adjustment from a virtually closed economy to one in which trade plays a more appropriate role. This view may offer some hope that China's export expansion may be slowing down even without currency changes

WTO entry a lead factor behind China's export boom

Although China is very cost competitive versus the OECD and much of the developing world, this was not the only reason for the surge in export growth seen during the 1990s and again in 2000 to 2005. Most of these gains have been due to adjustment from an abnormally low historic trade position. In the 1980s, China accounted for about 1 percent of world merchandise trade but its share is now close to 12 percent. In effect, both China's interests in participating in trade and its accessible export markets have changed radically, pulling actual exports up sharply. Being cost competitive will have helped accelerate this adjustment process but even if plausible revaluations had raised relative costs, much of the gain in trade share seen since the early 1990s would still have occurred.

In particular, the impact of WTO entry on Chinese trade has been phenomenal both in its scale and longevity, even viewed against the trade gains made by China pre-entry. The long, strong expansion that started in 2000, ahead of WTO entry in December 2001, has continued into 2005 – indeed with a boost to textile exports provided by the end of the Multi-Fibre Agreement (MFA) on textile quotas this year. Out of China's total exports in 2004 of nearly \$600 billion, as much as \$300 billion (nearly 20 percent of

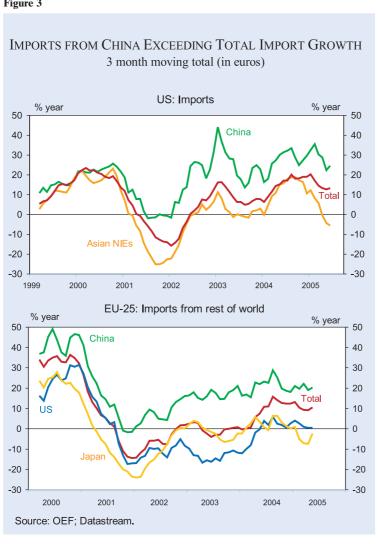
Weak link between China's exchange rate and export growth





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Figure 3



The share of exports in China's GDP has risen to 40 percent; its share of US and EU imports is nearing 15 percent 2004 GDP) was due to exports outperforming world trade, gains largely attributable to WTO entry. In fact, because investment has also doubled since 2001 (alongside trade flows), we may argue that the net stimulus to China's economy has been even higher than \$300 billion.

These WTO-related gains have been the drivers that have kept China's economy growing at a rate of more than 9 percent for the last three years - well ahead of most analysts' predictions in the late 1990s, when a slowdown was widely expected. China has overtaken Japan to become the world's third largest exporter - and the third largest importer - behind Germany and the U.S.

In as much as a large proportion of China's export success has been due to rapid adjustment from an exceptionally low share of world trade to a "fairer" share, then the speed of export growth should start to ease off as the process of adjustment comes to an end. The share of exports in China's GDP has risen from 20 percent in 1990 to about 40 percent, above the average world trade/GDP ratio of just under 35 percent, and only slightly less than the average for Asia of about 45 percent (WTO, World Trade Report 2004). In addition, with China's share of world manufactures trade now about 12 percent and its share of US and EU imports nearing 15 percent, further gains will be harder to achieve. Shares in the most easily penetrated sectors of trade (such as low cost textiles, toys and electronic equipment) are already high and new sectors, such as cars, other high value-added goods and branded consumer products will take longer to develop.

Indeed, China's export growth is already slowing down. Taking account of the estimated increase in export prices, export growth in volume terms is now appreciably weaker, in the 20 to 25 percent range versus a peak of as much as 30 to 35 percent in

2003 to 2004 (recent World Bank estimates also indicate these trends). Growth should settle back to about 15 percent by next year, aided by a further modest revaluation of 5 to 10 percent although this is not the main factor behind the forecast slowdown. This expansion will be faster than the global average, however, so China's share of world trade will still be rising but at a markedly slower pace than the last few years. At this rate, China will be about on a par with projected trade for the U.S. and EU by 2015, with exports (and imports) of some 3 trillion dollars (a share of about 15 to 17 percent in world trade).

As well as expecting a cooling off in the rate of China's export expansion, there is another reason for taking a more sanguine view of the impact on US and European producers: almost all of China's gains in trade have been at the expense of the rest of Asia, linked to the switching of production from higher cost parts of Asia. In fact, it is remarkable how little trade shares have changed for Asia as a whole. Over

the last 15 years, Asia's share of world trade has been virtually static at about 30 percent (measured excluding intra-EU trade and re-exports of Hong Kong and Singapore) with the U.S. accounting for about 20 percent and the EU just slightly more than the U.S. Asia's share of EU imports has also remained around 30 percent but the share in US imports actually fell by about 4 to 5 percent in the mid-1990s (to just under 40 percent), reflecting the impact of the Asian crisis on prices (i.e. with the US benefiting from lower import prices). However, in both the U.S. and EU, China has rapidly increased its share of trade, mostly at the expense of Japan but also, for the U.S., reducing the share of the NICs (WTO, 2004).

Tables 1 and 2 show the breakdown of US and EU imports by major trading partners. While China's share of US imports increased from 8.2 percent in 2000 to 13.4 percent in 2004, the shares of six of China's neighbours fell. The picture for the EU is broadly similar, except for the notably poor US export performance.

If China's imports are also rising, why is this expansion in trade a threat?

Although China's exports have risen rapidly, imports have grown more or less in tandem. Until 2005, China's trade surplus was quite small, about \$20 to 40 billion versus a surplus of more than \$150 billion for Japan (based on similar levels of trade). There has been a sharp rise in China's trade surplus in 2005, which will probably reach \$75 to 100 billion, but this is most likely due to exceptional factors related to de-stocking and speculative trading in 2005, linked to expected revaluation (speculative trading paterns were also visible in 1993 ahead of currency unification).

So why is there so much concern over China's trade trends? Rapid world trade growth is generally wel-

Table 1
US imports from rest of the world
% of total

	2000	2004	"swing"
China	8.2	13.4	+ 5.2
Taiwan	3.3	2.4	- 0.9
Korea	3.3	3.1	- 0.2
Singapore	1.6	1.0	- 0.6
Hong Kong	0.9	0.6	- 0.3
Japan	12.0	8.8	- 3.2

Table 2
EU-25 imports from rest of the world
% of total

	2000	2004	"swing"
China	7.5	12.3	+ 4.8
Taiwan	2.8	2.3	- 0.5
Korea	2.7	2.9	+ 0.2
Singapore	1.7	1.7	0.0
Hong Kong	1.2	1.0	- 0.2
Japan	9.2	7.2	-2.0
U.S.	20.6	15.3	- 5.3

comed and seen as promoting global GDP growth, trend factor productivity gains and low inflation.

It is myopic to see China's trade boom as a purely negative factor for the US and EU economies: trade with China has brought benefits in terms of lower consumer prices and the potential to increase efficiency and thus raise total factor productivity. We estimate that OECD consumer prices may be some 2 to 3 percent lower now than they would have been had China's exports only grown in-line with the average for world trade since 2000 (e.g. had China not gained WTO entry). While some industries feel pressured by competition, others have gained from increased consumer spending power and from China's need for imports. China has provided a boost to German equipment exports and French luxury goods sales, for example.

In fact, if China's export growth slows, so too will its need for imports. About half of China's imports may be directly linked to export production in the form of raw materials and investment equipment. Even if consumers are stepping up demand for imported goods, consumer products represent a small share of China's total imports and it will take some years for these to become large enough to dominate trade.

This highlights a problem posed by China's pattern of trade. It is not that China exports too much but that its substantial import requirements are not spread evenly across the countries to which it exports, leading to a large bilateral surplus with the U.S. and, less pronounced, with the EU (bilateral trade data are reported in the tables in the data annex). Offsetting these surpluses, China has trade deficits with its Asian trade partners and with its raw material suppliers, notably the oil producers.

The "imbalanced" geographic pattern of China's trade reflects its "imbalanced" trade by product (Table 3). Exports are dominated by consumer

Growth of China's trade benefits the U.S. and the EU

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Table 3
Strucure of Chinese trade in 2003

	% of exports	% of imports
Raw materials including		
energy	9.2	20.1
Intermediate goods	12.8	21.5
Equipment	42.9	46.7
Consumer goods	34.9	11.4

Source: WTO.

goods (35 percent of total exports) and electronic and electrical equipment (over 40 percent share), whereas imports are largely raw materials (e.g. oil, iron ore, copper and cotton), intermediate goods and investment equipment with consumer goods only 11 percent of total imports. Trade developments during 2003 to 2004 illustrate this position. Imports of raw materials have risen sharply over the last two years as China is no longer self sufficient, with oil imports up 31 percent in 2003 and 35 percent in 2004

and iron ore imports up 33 percent in 2003 and 40 percent in 2004. This rise in raw material requirements offers little direct benefit to US or EU exporters. In addition, some intermediate goods imports are now seeing import substitution following China's investment boom (e.g. aluminium and steel). Thus the main markets for US and EU exporters are investment equipment (which depends on China sustaining its high rate of investment) and luxury consumer goods (which depend on China maintaining consumer sentiment and wealth creation).

In terms of export growth, gains have been particularly rapid in consumer electronics (with more than 50 percent year-on-year gains in mobile phones and over 30 percent growth in television sales) and in other new markets for Chinese exporters, such as furnishings. Contrary to public imagination, growth in mature sectors such as toys and clothing, where China has been the leading supplier for some time, has been appreciably slow-

Table 4
China's share of world exports

	2000	2002	2003
Agricultural products	3.0	3.2	3.3
Total manufactures	4.7	6.2	7.3
Iron & steel	3.1	2.3	2.7
Chemicals	2.1	2.3	2.5
Office machines &			
elecoms equipment	4.5	9.0	12.6
Textiles	10.5	13.5	15.9
Clothing	18.3	20.6	23.0
Toys*	70.9		

* % of US toy imports from China (2000). WTO data are based on total world trade including EU internal trade (China's share is larger if esti-

Sources: WTO, Toy industry association (US).

mated excluding EU internal trade).

er. Toy exports are rising at about 7 percent per annum, for example, and clothing sales rose 19 percent in 2004, down from 26 percent in 2003. Although the end of the MFA may have provided a boost to China's clothing exports in 2005, the very

Figure 4



Machinery and equipment are an important factor in US and EU exports to and imports from China substantial growth rates being quoted by the US and EU (as high as 50 percent) refer to specific categories of garment imports: for broad categories of textiles, footwear, accessories etc., China's exports are reported to be up 10 to 20 percent from 2004. Table 4 shows that, according to the WTO, China's share of global clothing exports was 23 percent in 2003, and this probably increased only slightly, to about 25 percent, last year.

Machinery and transport equipment are the goods that really dominate China's sales to its main trade partners - accounting for about 40 percent of US imports from China, 45 percent for the EU and 35 percent for Japan. Indeed, the rapidly rising office and telecoms equipment segment alone accounts for some 20 to 30 percent of all imports. This compares with shares for toys of less than 10 percent and a share for all textiles/clothing/footwear combined of 15 to 20 percent for the U.S. and EU, rising to about 25 percent for Japan. The problem with China's textile exports is clearly less to do with the overall scale of such exports than their impact on already fragile industries and employment in the U.S. and the EU. Notably, there has been little publicity over electronic equipment imports from China although these represent a larger, and faster growing, component of trade with China.

In hi-tech exports (computers and components, semiconductors and telecoms), China's performance has been even stronger. Its share of all ICT sales has climbed from just 3 percent in 2000 to 16 percent in 2005 (to date). These are undoubtedly sectors in which China has raised its share of world markets at the expense of other Asian exporters.

Liberalising the exchange rate and capital account is important for China

While China's exports are the preoccupations of the U.S., the EU and other trade partners, from China's perspective, capital flows are also an important issue. Large swings in capital flows have been seen in recent years in spite of a supposedly closed capital account. Excluding FDI, total annual outflows were probably more than \$50 billion per annum in the late 1990s, whereas inflows may have been as high as \$100 billion over the last year. Fluctuations on this scale suggest volatility would be even greater under a liberalised capital account. However, capital outflows could help to alleviate China's "excess" savings

problem and the threat of banking and investment bubbles this poses.

Although capital inflows have been blamed for stoking up China's credit growth, the main factor behind such growth has been the high rate of domestic savings. The expansion in bank loans of 14 percent in 2004 and 22 percent in 2003 (a total rise in credit of about \$600 billion from the end of 2002 to the end of 2004) was largely "home grown" out of savings inflows into bank deposits. With most savings bottled up in China's banking system, deposit accounts represent about 200 percent of GDP. If 100 to 150 percent of GDP might be considered more "normal", this possibly implies scope for a flow into other forms of savings, including investments abroad, of around one trillion dollars at current rates of GDP, more than equivalent to China's present level of foreign exchange reserves.

Although China's balance of payments position is far from precarious, exaggerated confidence might be inappropriate in the medium term given the potential for:

- Changes in net trade that may curb the trade surplus.
- Swings in the capital account, possibly into a sizeable deficit.

Revaluation of the RMB will most likely encourage both these trends over the next few years. Although we are sceptical about the scale of any change in exports associated with such revaluation, sharp swings in the balance of payments may well occur given the scope for volatility in capital flows. We could find ourselves surprised by the scale and speed of losses. The RMB might then turn around and devalue, an outcome seemingly overlooked by those presently urging China to liberalise.

Summary

Opinion concerning the benefits of China liberalising its exchange rate regime has clearly been dominated by concern over the rapid rise in China's exports over the last few years and the expectation that revaluation might reduce this growth. Export sales have continued to increase at annual rates of around 35 percent, putting China's share of world manufactures trade at nearly 12 percent this year, double the share recorded in 2000 and up from only

Large swings in capital flows and high domestic savings

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The U.S.-China bilateral trade deficit is double that of the EU-China deficit 2 percent in 1990 and about 1 percent a decade before that. Shares in US and EU imports have risen at similar rates and are now around 15 percent, commensurate with US and EU shares in each other's trade. Whilst the U.S. has been most vociferous about the rise in the US-China bilateral trade deficit, the EU has also seen mounting demands for protection from industries finding competition tough, especially in the textiles sector. Further revaluation of the renminbi (RMB) would be welcomed by these sectors. Nevertheless, EU retailers are beginning to complain about restrictions placed on low cost imports from China. For consumers, cheaper goods mean greater purchasing power - more disposable income available for discretionary spending on other goods. This reflects the long-term advantages from opening up to trade: enhanced productivity gains from sector specialisation and lower prices for traded goods. So a stronger Chinese currency may not prove popular with everyone in the economy after all.

Annex: Bilateral Trade Data

These tables provide information on bilateral trade for China, the U.S., the EU and their trade partners. Discrepancies in reporting between China and its trade partners are largely (although not solely) due to trade passing through Hong Kong (China reports trade based on Hong Kong as the destination of exports rather than designating exports according to their final destination after passing via Hong Kong).

Chinese trade data (\$ bn)	
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		exports		imports	tra	de balance
Versus	2004	12 mths to May	2004	12 mths to May	2004	12 mths to May
Taiwan	13.5	15.1	64.8	67.0	- 51.2	- 51.9
Korea	27.8	31.8	62.2	67.1	- 34.4	- 35.3
ASEAN	42.9	48.9	63.0	66.9	-20.1	- 18.0
Russia	9.1	10.2	12.1	13.3	-3.0	- 3.2
Saudi Arabia	2.8	3.2	7.5	9.5	- 4.7	- 6.3
Australia	8.8	9.8	11.6	13.3	-2.7	- 3.5
EU	104.6	122.4	69.2	70.7	35.4	51.7
Japan	73.5	79.1	94.2	95.2	-20.7	- 16.1
UŠ (China basis)	124.9	140.1	44.7	44.9	80.3	95.2
US + HK (China basis)	225.8	248.9	56.5	57.2	169.3	191.7
Other	84.5	92.8	120.4	130.9	- 35.9	- 38.1
Total	593.4	662.2	561.4	591.1	32.0	71.1

US trade data (\$ bn)

		exports	imports		trade balance	
Versus	2004	12 mths to May	2004	12 mths to May	2004	12 mths to May
China (US basis)	34.7	35.9	196.7	215.9	- 161.9	- 180.1
EU	172.6	178.5	282.0	291.7	- 109.3	- 113.2
Japan	54.2	53.7	129.8	134.0	- 75.6	- 80.3
Canada	189.9	199.4	256.4	266.9	- 66.5	- 67.5
Mexico	110.8	114.2	155.9	161.3	- 45.1	- 47.1
OPEC	22.3	26.4	94.1	105.5	- 71.8	- 79.0
NIEs	83.6	85.2	105.5	106.1	- 21.9	-20.9
of which:						
Hong Kong	15.8	16.2	9.3	9.0	6.5	7.2
Other	139.4	147.0	252.6	274.4	- 113.3	- 127.4
Total	807.5	840.3	1,472.9	1,555.7	- 665.4	- 715.4

EU-25 trade with rest fo the word (euro bn)

	exports		imports		trade balance	
Versus	2004	12 mths to May	2004	12 mths to May	2004	12 mths to May
U.S.	234.3	236.6	157.7	157.9	76.5	78.7
China	48.1	47.9	127.0	136.8	- 78.9	- 88.9
Switzerland	75.0	78.2	61.5	62.4	13.5	15.8
Russia	45.7	49.6	80.5	90.6	- 34.8	- 41.0
Japan	43.2	43.1	73.7	72.4	- 30.5	- 29.3
Norway	30.8	31.8	56.0	59.2	- 25.2	-27.4
Turkey	38.0	38.2	31.0	32.7	7.0	5.5
Canada	22.0	22.1	16.3	16.1	5.7	6.0
Total	968.3	993.7	1,029.6	1,070.9	- 61.3	- 77.2