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### Asian Tiger Economies' choices

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## *The Asian Tiger Economies' Choices*

HWEE KWAN CHOW

The 2008–09 global economic crisis hit the Asian Tiger economies of Hong Kong, China; the Republic of Korea; Singapore; and Taipei, China hard, despite their strong macroeconomic fundamentals and sound financial systems. Following the 1997 Asian financial crisis, these economies had strengthened current accounts and had significant expansion in foreign reserves. Meanwhile, their financial systems had become more resilient, with the restructuring of balance sheets and the enhancement of surveillance. Nevertheless, each Tiger economy experienced a collapse in exports and an attendant sharp contraction of GDP in the second half of 2008 as global demand faltered. The GDP for Hong Kong, China; the Republic of Korea; Singapore; and Taipei, China contracted by –7.8 percent, –4.2 percent, –9.5 percent, and –10.1 percent, respectively, in the first quarter of 2009. Such developments reflect the small open nature of these economies and highlight their vulnerability to external shocks.<sup>1</sup> There were also signs of financial contagion in the case of the Republic of Korea, which at one juncture suffered from currency turmoil.<sup>2</sup>

Subsequently, toward the end of 2009, the Asian Tiger economies rapidly rebounded, with the support of swift domestic policy responses on both the fiscal

This chapter consolidates two ADBI working papers by Chow (2010) and Ha, Lee, and Sumulong (2010).

1. Merchandise exports as a percentage of GDP for Hong Kong, China; the Republic of Korea; Singapore; and Taipei, China are 169 percent, 45 percent, 185 percent, and 65 percent, respectively.

2. Hence, this chapter places special emphasis on the case of the Republic of Korea.

and monetary fronts. Fiscal stimulus measures amounted to around 2.6 percent of GDP for this group of countries, and by the first half of 2009, nearly 40 percent of the fiscal stimulus had been implemented (IMF 2009). Meanwhile, massive policy stimulation in the advanced countries led to the normalization of global trade, while public support of their financial sectors lifted financial market sentiment. The Asian Tiger economies on average grew 4.8 percent from 2010 to 2013 (IMF 2014). There has also been a resurgence of private capital flows into these economies in search of high-yielding investments, underscoring international investor optimism about the region's growth prospects. Consequently, stock prices and property prices have been trending up amid the flood of global liquidity inflows, and these developments have raised concerns about the emergence of asset-price bubbles in these economies.

By contrast, growth in the major advanced economies was modest at 3 percent in 2010. The recovery was weighed down by various factors such as high unemployment rates, large public debt, difficult financial conditions, and weak household balance sheets. In light of these challenges, the advanced economies experienced sluggish growth of 1.5 percent from 2011 to 2013 (see IMF 2014). Consequently, their demand for Asian exports will most likely remain subdued in comparison with the precrisis period. Hence to sustain the ongoing economic recovery, it is imperative for the Asian Tiger economies to rely on domestic and regional demand for growth. In other words, policymakers in these economies will need to work toward the rebalancing of demand from economies, such as the United States, that have large current account deficits in relation to the Asian countries that have large current account surpluses. Even though these imbalances did not directly cause the recent global turmoil, they still pose the risk of sparking another financial crisis, as the imbalances are deemed to be unsustainable and may unwind in a disorderly manner, involving a sharp fall in the U.S. dollar or a protracted economic downturn in the industrialized countries, either of which would have adverse consequences for the world economy, not least the Asian Tiger economies.

Addressing the issue of current account imbalances, however, requires a better understanding of the causes. Asia's current account surpluses grew rapidly after the 1997–98 Asian financial crisis, as a result of declining domestic demand. Investment rates fell sharply in the crisis-hit economies as well as in the region's newly industrialized economies (Lee and McKibbin 2007). External imbalances are not just an external problem and should not be judged solely by their size. In open economies, current account imbalances can naturally emerge from country-specific macroeconomic and financial factors; as long as the imbalances reflect economic fundamentals, these cannot be considered bad. However, current account imbalances can also result from internal microeconomic imbalances or from domestic distortions caused by market inefficiencies or public policies (Blanchard and Milesi-Ferretti 2009). The domestic saving-investment (S-I) imbalance, as well as policies on export orientation, exchange rates, and reserve

management, can all have an impact on external imbalances. These internal factors suggest that exchange-rate adjustments alone will not bring about balanced growth.

## Evolution of Saving and Investment

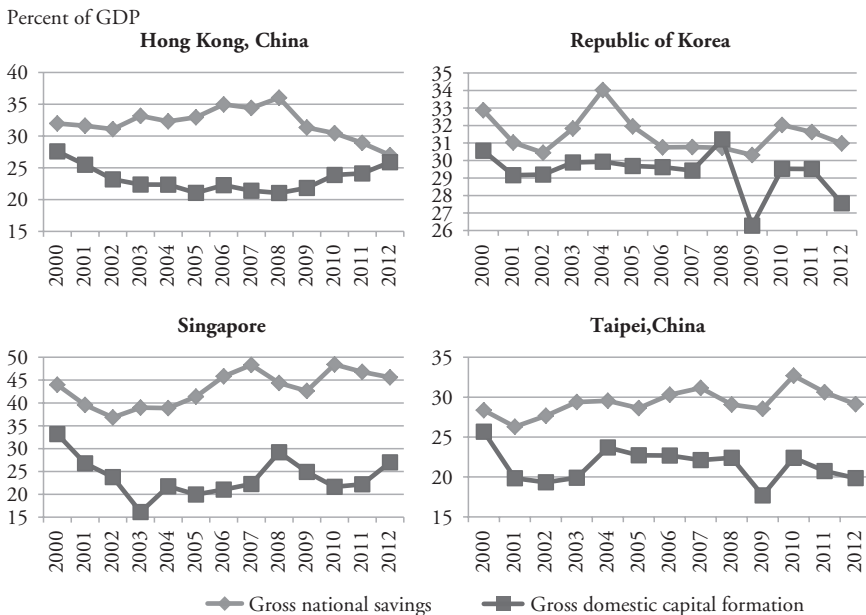
From 2000 to 2008 the overall gross national saving rate remained high, at an average rate of 31 percent of GDP. This high level of savings could be attributed to key factors that influence long-term development in private saving rates, such as economic growth, demography, precautionary savings by firms in the aftermath of the Asian financial crisis, and the level of financial uncertainty faced by households (see Loayza, Schmidt-Hebbel, and Servén 2000). Over the same period, overall gross investment hovered around a lower mean level of 26 percent of GDP. Possible explanations for the lower level of investment following the Asian crisis include the relocation of production facilities from the Asian Tiger economies to the People's Republic of China (PRC) and the shift in emphasis from capital-intensive production to an information technology- and knowledge-based economy (IMF 2005). In any case, both saving and investment rates fell in 2009 by about 3 and 5 percent, respectively, in the aftermath of the global economic crisis. The resulting S-I balance stayed positive throughout the period and widened by only 2 percent of GDP between 2000 and 2009. Concomitantly, the current account surplus shrank from more than 5 percent to around 4 percent in 2008 at the onset of the crisis, as the massive slowdown in exports was outweighed by an even sharper deceleration in imports. However, the dip proved temporary, as the current account surplus climbed to more than 6 percent of GDP in 2009.

Do these movements in overall rates mask variations across the countries? In what follows, we provide a series of charts that give an overview of the evolution of saving and investment in the individual countries. Figure 7-1 depicts trends in gross national saving and gross domestic investment, and figure 7-2 shows the current account balance, for each of the Asian Tigers.

The S-I balance in both the Republic of Korea and Singapore first increased and then narrowed over the past decade (figure 7-1). In the Republic of Korea, gross domestic investment overtook gross domestic saving, producing a negative current account balance in 2008 (figure 7-2).<sup>3</sup> In comparison, the S-I balance for Hong Kong, China and Taipei, China broadened between 2000 and 2008. In particular, Hong Kong, China's S-I gap widened considerably, from 4 percent to 14 percent of its GDP, over this period. From the external perspective, figure 7-2

3. The Economist Intelligence Unit revised its rating methodology in the second quarter of 2006, and until the third quarter of 2008 it classified the Republic of Korea as low risk, which may have contributed to the pickup in investment in 2008. This trend could very well have continued had the global financial crisis not erupted.

Figure 7-1. *Gross National Saving and Gross Domestic Investment, as Share of GDP, Asian Tigers, 2000–12*

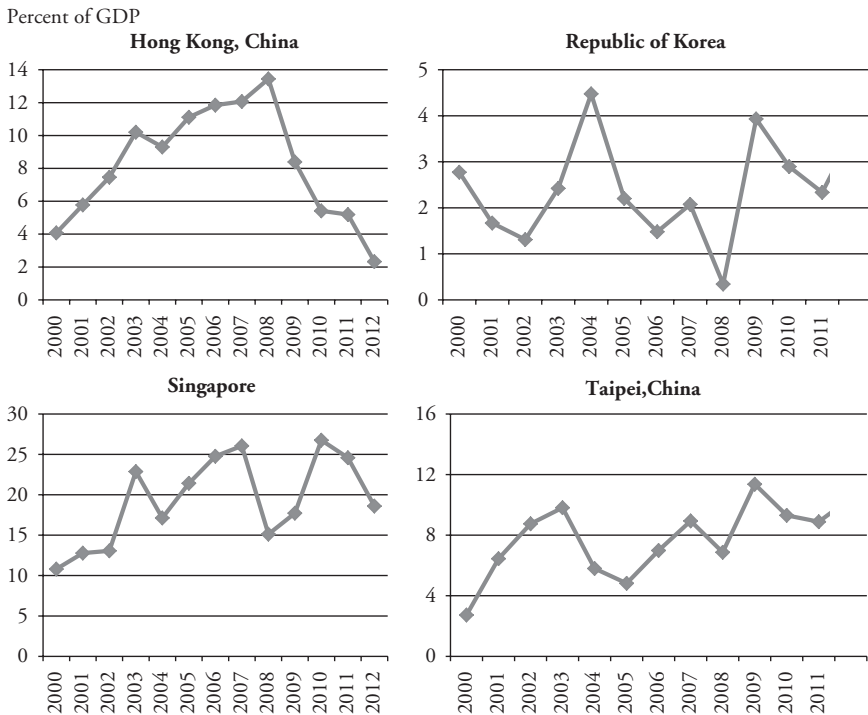


Source: International Monetary Fund, *World Economic Outlook* database, April 2013.

shows that the current account surplus in Hong Kong, China exhibited the most persistent climb over the past decade. Between 2000 and 2008, the average current account surplus amounted to 10.9 percent, 1.7 percent, 19.8 percent, and 16.5 percent of GDP for Hong Kong, China; the Republic of Korea; Singapore; and Taipei, China, respectively, with the corresponding coefficient of variation at 0.3, 0.8, 0.3, and 0.2. Although the Republic of Korea has the lowest mean current account surplus during this period, it has the highest volatility among the four economies.

A better understanding of the determinants of the trends in gross saving and investment would require a breakdown of the macroeconomic-level data into sectoral-level data. Unfortunately, published data on the composition of saving and investment in terms of government, corporate, and household sectors are available only for the Republic of Korea. Although the dichotomy between public and private domestic investment is available for the three other Asian Tiger economies, there are no official data on public and private saving. To gain a tentative indication of the trends in public versus private saving rates, we compute public saving as the difference between total government revenue and government consumption. Private saving is then estimated as the residual from gross saving. The evolution of gross national saving and its various components for the individual

Figure 7-2. *Current Account Balance as Share of GDP, Asian Tigers, 2000–12*



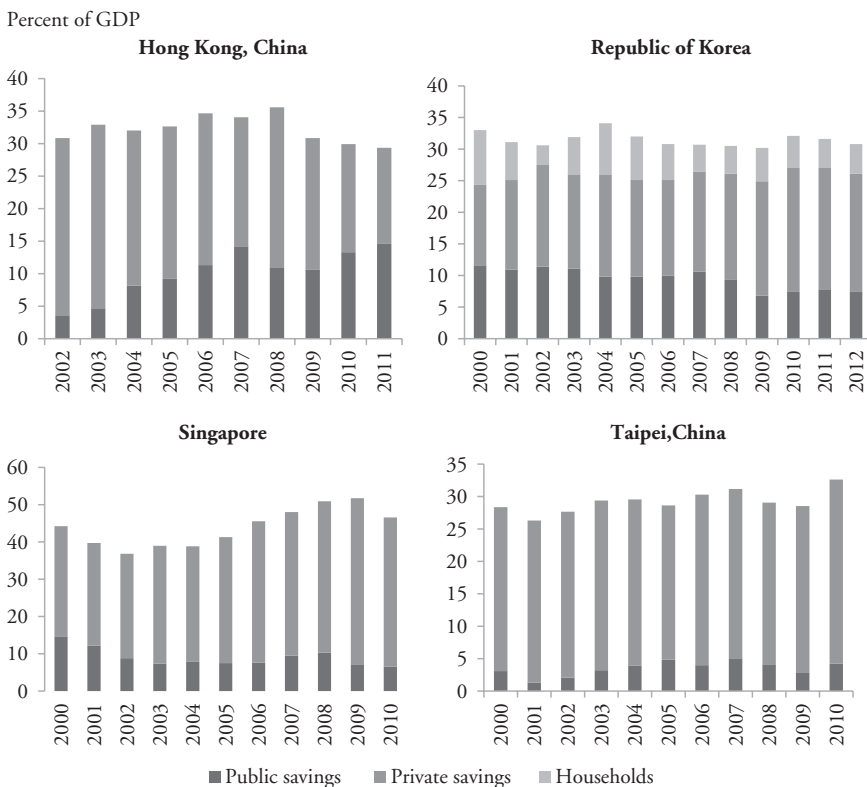
Source: International Monetary Fund, *International Financial Statistics* database.

economies are plotted in figure 7-3, and the corresponding data for investment are found in figure 7-4.

We observe from figure 7-3 that gross national saving in Hong Kong, China and Taipei, China rose by 3 and 4 percent of GDP, respectively, over the past decade. Although the increase in Hong Kong, China was largely driven by public saving, which went up by more than 2 percent of GDP, it was private saving, which rose by 8 percent of GDP, that led to higher gross saving in Taipei, China. By contrast, gross national saving in the Republic of Korea fell from 33 percent of GDP to 31 percent of GDP between 2000 and 2007 as household saving declined by more than half, from 9 percent to 4 percent. Government saving held steady at around 10 percent of GDP, while corporate saving increased by 3 percent of GDP over the same period.<sup>4</sup> As for Singapore, there was hardly any change in gross national

4. The leverage ratios of Korean firms declined dramatically after the Asian financial crisis. Total borrowings and bonds payable of manufacturing firms reached 50.1 percent of total assets in 1998; by 2008, this ratio had fallen to about 26.3 percent of total assets. Debt ratios (defined as the ratio of total liabilities to stockholders' equity) of manufacturing firms also declined substantially, from more than 300 percent to about 100 percent in the same period.

Figure 7-3. *Components of National Saving as Share of GDP, by Sector, Asian Tigers, 2002–12*

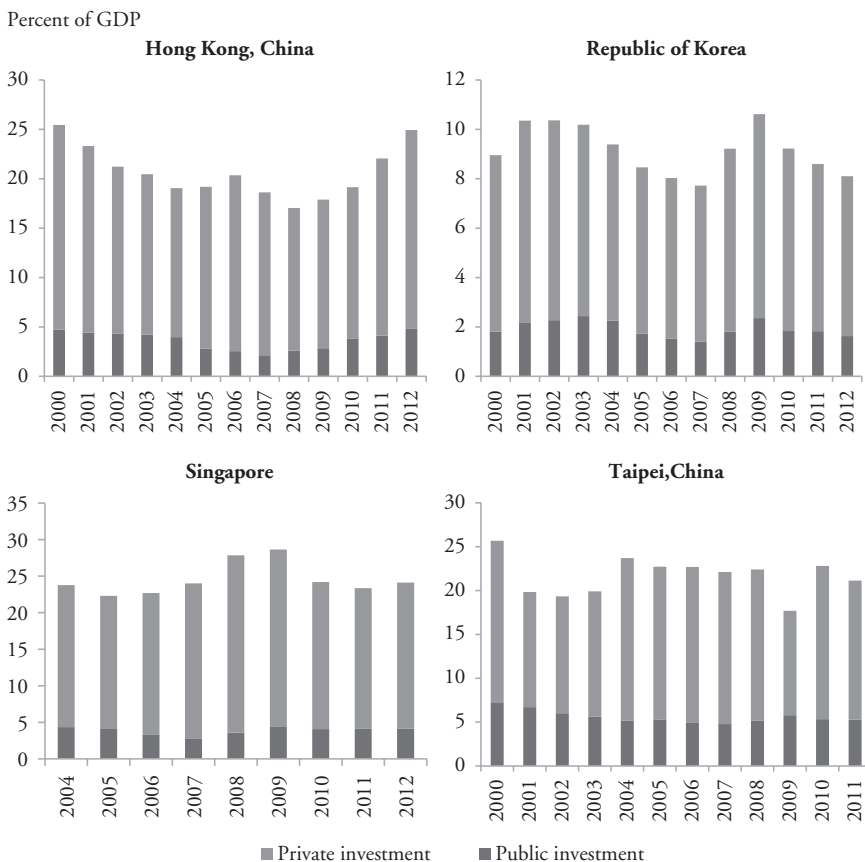


Source: Data from Census and Statistics Department, Hong Kong, China; Bank of Korea; Ministry of Trade and Industry, Singapore; and Directorate-General of Budget, Accounting, and Statistics, Taipei, China.

saving between 2000 and 2008. Public saving, which tended to be the driving force of the saving process in Singapore, fell by about 6 percent, but this was completely offset by an increase in private saving.

Fluctuations in investment from 2000 to 2008 also differed somewhat across the Asian Tiger economies (see figure 7-4). Gross domestic investment exhibited a downward trend over the past decade for Hong Kong, China and Taipei, China. The decline in both economies can be attributed to a drop in public investment and, in the case of Hong Kong, China, a slip in private investment, as well. By contrast, gross domestic investment in the Republic of Korea held steady over the period, and its composition remained broadly unchanged from 2000. As for Singapore, the gross domestic investment initially slowed and then picked up, despite a continuous decline in public investment. Singapore's high private investment rate is partly a result of its development strategy of attracting export-oriented foreign firms.

Figure 7-4. *Components of Domestic Investment as Share of GDP, by Sector, Asian Tigers, 2000–12*

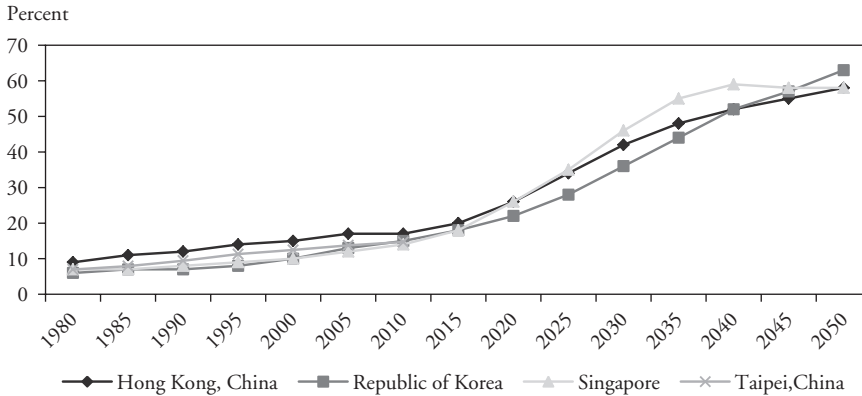


Source: Data from Census and Statistics Department, Hong Kong, China; Bank of Korea; Ministry of Trade and Industry, Singapore; and Directorate-General of Budget, Accounting, and Statistics, Taipei, China.

In summary, savings have generally been higher than investment in the past decade for the Asian Tiger economies. Over the longer term, however, the saving rates in these economies are likely to decline as household consumption increases along with the projected shifts in demographic profiles. With reference to the life-cycle hypothesis, an aging population tends to put downward pressure on the saving rate as there is a tendency for the elderly to consume out of savings on retirement. In addition, spending on social services for the elderly, coupled with a lower tax base owing to a smaller workforce, implies a reduction in public savings. The findings of an IMF (2005) study that uses panel regression analysis confirm that the old-age dependency ratio—the ratio of those aged sixty-five and



Figure 7-5. *Elderly Dependency as Share of Total Population, Asian Tigers, 1980–2050*



Source: Data for Hong Kong, China; the Republic of Korea; and Singapore are sourced from United Nations (2008). Owing to unavailability of data for Taipei, China, we compute the old age dependency ratios from 1980 to 2009 based on data from CEIC.

over to the population aged fifteen to sixty-four—is negatively associated with savings. In the study, each percentage-point increase in the elderly dependency ratio is estimated to raise consumption by 3 percentage points of GDP, suggesting that life-cycle factors do have a significant effect on the savings rate.

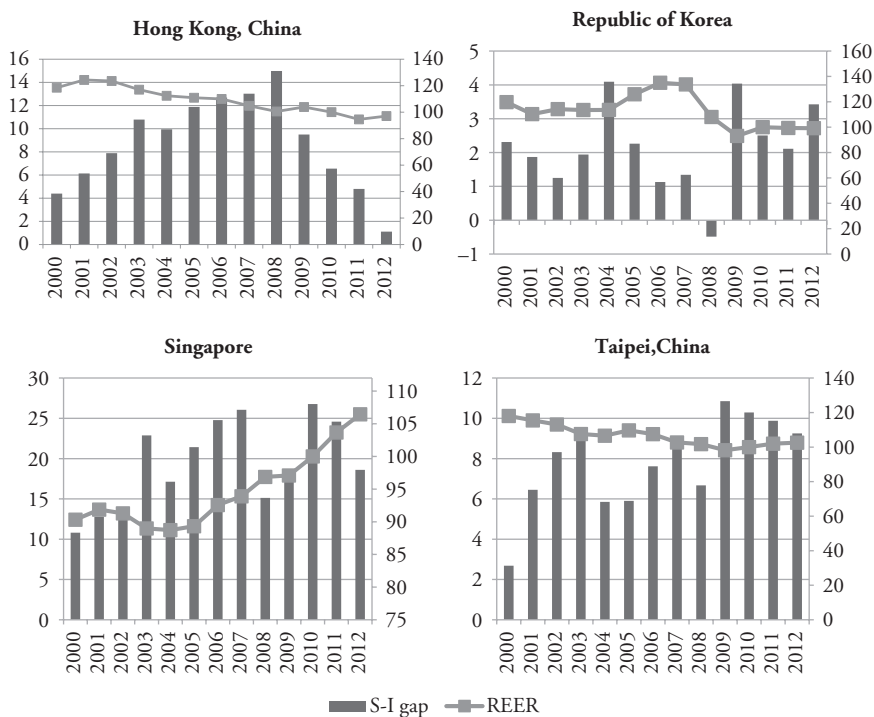
Figure 7-5 depicts the past and projected old-age dependency ratio for the Asian Tiger economies. We observe that, without exception, the elderly dependency ratio has been going up and is likely to climb further.<sup>5</sup> The hitherto high saving rates in these economies could partly be attributed to higher household saving as people prepare for retirement. More-developed financial sectors could thus help reduce the precautionary motive for saving. Looking ahead, we infer that ongoing changes in the age composition of the population in these economies are likely to increase the consumption-to-GDP ratio, notwithstanding bequest motives. Such adjustments are nonetheless likely to be gradual even as shifts in demographic profiles occur only slowly (Eichengreen 2006).

### Role of Exchange-Rate Adjustment

How do fluctuations in the exchange rate affect the current account balance? A higher exchange-rate value makes local goods dearer in foreign currency terms and, at the same time, foreign goods cheaper in domestic currency terms. Hence

5. Demographic change in Singapore was supposed to produce one of the world's most rapidly aging populations. However, the transition toward an older population structure was slowed by large-scale immigration and importation of foreign talent and workers.

Figure 7-6. *Real Effective Exchange Rate and S-I Balance as Share of GDP, Asian Tigers, 2000–2012*



Source: Asian Development Bank, *Key Economic Indicators* database; Bank for International Settlements database.

an appreciation of the domestic currency is expected to dampen exports and boost imports, effectively reducing the trade surplus. Since net exports form the main component of the current account surplus of the Asian Tiger economies, a domestic currency appreciation would tend to narrow the positive S-I balance.

#### *S-I Balance and the Exchange Rate*

In this subsection, we investigate how developments in the S-I balance of the Asian Tiger economies relate to fluctuations in the value of their domestic currency. Figure 7-6 depicts the real effective exchange rate superimposed on the S-I balance from 1990 to 2009 for the individual economies.

A visual inspection of figure 7-6 suggests an apparent negative association between the level of the real effective exchange rate and the magnitude of the S-I balance. In general, a lower level of the real effective exchange rate tends to be associated with a higher level in the S-I balance. This negative relationship is particularly evident in the case of Hong Kong, China and Singapore and is discern-

ible for the Republic of Korea. The figure reveals a persistent decline in the Hong Kong dollar in real effective terms over the past decade. During this period, the S-I balance in Hong Kong, China rose steadily. The real effective exchange rate of the Singapore dollar initially fell, reaching a trough in 2005, and then started to climb. Interestingly, the magnitude of the S-I balance in Singapore seems to mirror these movements in the exchange rate but with a lag. The strengthening of the Korean won in real effective terms picked up pace after 2004, accompanied by a lowering of the S-I balance in the recent period. Taipei, China is the only exception. We see from figure 7-6 that the depreciation in its real effective exchange rate does not appear to have a consistent relationship with the level of the S-I balance.

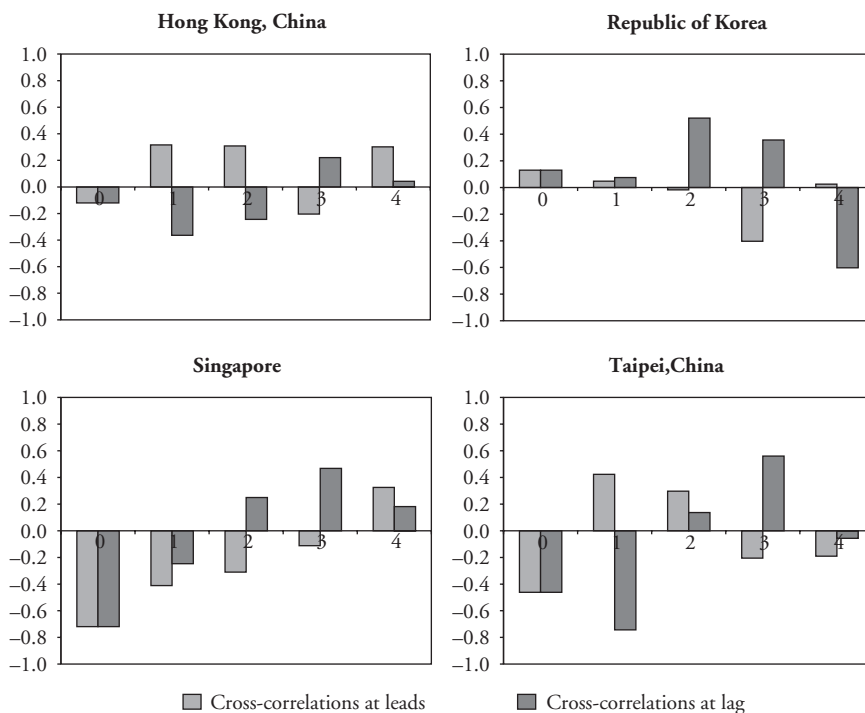
However, when considering the magnitude of response of the S-I balance to exchange-rate changes, the relevant relationship is not the one between the levels of the variables but that between the movements in these variables. For a tentative indication of the strength of linear association between changes in the S-I gap and changes in the real effective exchange rate, we examine the cross-correlation coefficients between the first differences of the two variables for the individual economies. First, we observe from figure 7-7 that the correlation coefficients at leads are in general not more significant than those at lags, implying that fluctuations in the real effective exchange rate do not exhibit a dominant leading relationship over changes in the S-I balance in all four economies. Second, the correlation coefficients occurring at lead time are not predominantly negative. These findings suggest that a depreciation of the real effective exchange rate in the Asian Tiger economies may not necessarily be linked to an increment in the S-I balance in the short run. We note that these cross-correlation coefficients are preliminary rough estimates as they are computed over a small number of time periods. In what follows, we carry out a more detailed econometric analysis of the impact of exchange-rate changes on the current account balance in the Republic of Korea.

#### *Econometric Analysis of the Republic of Korea's Current Account*

The Republic of Korea's current account seems to be correlated with major economic variables such as exchange rates, national GDP, and world GDP.<sup>6</sup> To determine the exact magnitude of the effects of these variables, we conducted econometric analyses using the dynamic ordinary least squares method. Specifically, we set up the following models for exports and imports. Equation 7-1 is for exports, where the real effective exchange rate and world GDP are the determinants. Equation 7-2 is for imports, where the real effective exchange rate and the Republic of Korea's GDP are the main determinants.

6. This subsection draws from Ha, Lee, and Sumulong (2010).

Figure 7-7. Cross-Correlations between Changes in Real Effective Exchange Rate and Changes in S-I Balance, Asian Tigers, 2000–08



Source: Author's calculations.

$$(7-1) \quad ex_t = \alpha + \beta_1 reer_t + \beta_2 wgdpt_t + \sum_{j=-p}^p \beta_{reer,j} \Delta reer_{t-j} + \sum_{j=-p}^p \beta_{wgdpt,j} \Delta wgdpt_{t-j} + u_t,$$

$$(7-2) \quad im_t = \alpha + \beta_1 reer_t + \beta_2 gdpt_t + \sum_{j=-p}^p \beta_{reer,j} \Delta reer_{t-j} + \sum_{j=-p}^p \beta_{gdpt,j} \Delta gdpt_{t-j} + u_t.$$

Here, *ex* is export volumes, *im* is import volumes, *reer* is real effective exchange rate, *wgdp* is world GDP, and *gdp* is the Republic of Korea's GDP. All variables are in natural logs and use quarterly data from various sources.<sup>7</sup> Equations 7-1 and 7-2 are estimated with  $p = 2$ .

7. The data for Korean export volumes, import volumes, and GDP have been obtained from the Bank of Korea Economic Statistics System ([http://ecos.bok.or.kr/EIndex\\_en.jsp](http://ecos.bok.or.kr/EIndex_en.jsp)). Real effective exchange rates for the Republic of Korea, Dubai crude oil prices, and world GDP growth rates have been obtained from Bloomberg, and real effective exchange rates for Japan from the International Monetary Fund, *International Financial Statistics* database.

Table 7-1. *Determinants of Exports, Republic of Korea, 1996–2007*<sup>a</sup>

Variable	Full sample		Noncrisis periods only	
	Coefficient	t statistic	Coefficient	t statistic
Constant	-11.74***	-28.54	-8.14***	-4.36
Real effective exchange rate	-0.16**	-1.97	-0.01	-0.02
World GDP	3.44***	49.65	2.52***	3.76
Adjusted <i>R</i> <sup>2</sup>	0.9847		0.9838	
Sample (adjusted)	1996Q4–2009Q2		2000Q4–2007Q2	
N	51		27	

Source: Ha, Lee, and Sumulong (2010).

a. Coefficients on differences and lagged differences are not shown in the table.

\*\*\*Significant at the 1 percent level.

\*\*Significant at the 5 percent level.

\*Significant at the 10 percent level.

The results for equation 7-1 are summarized in table 7-1. The first column is the specification for equation 7-1 with the full sample. The results show that the Republic of Korea's exports are significantly correlated with exchange rates and world GDP, as predicted by economic theory. However, the coefficient of the exchange rate, indicating the exchange-rate elasticity of exports, is much smaller (-0.16) than that of world GDP (3.44). This means that a 1 percent depreciation in the real effective exchange rate will increase the Republic of Korea's exports by 0.16 percent,<sup>8</sup> whereas a 1 percent increase in world GDP will increase the Republic of Korea's exports by 3.44 percent.

Overall, these results may have been influenced by drastic changes in the variables during the 1997–98 Asian financial crisis and the 2008–09 global financial crisis. If a stable period were considered, the same econometric model would give a totally different picture. The second column in table 7-1 shows the results for equation 7-1 for the noncrisis period covering 2000Q4–2007Q2. For this sample, the effect of the exchange rate on exports has virtually no significance, while world GDP has a strong effect.<sup>9</sup> During this noncrisis period, the won appreciated without reducing the pace of export growth.

Table 7-2 shows similar results for imports: while the real effective exchange rate and GDP are generally important determinants, the exchange-rate elasticity

8. While a depreciation in the real effective exchange rate increases real exports, the impact of the nominal exchange rate on exports would also depend on the magnitude of exchange-rate pass-through, that is, the extent to which exporters change export prices in response to the exchange rate.

9. We also considered the real effective exchange rate of the Japanese yen as an additional determinant of the Republic of Korea's exports. The coefficient of the Republic of Korea's real effective exchange rate, *reer*, increased to -0.43 in the estimation with the full sample but remained insignificant in the noncrisis sample.

Table 7-2. *Determinants of Imports, Republic of Korea, 1996–2007*<sup>a</sup>

Variable	Full sample (1)		Noncrisis periods only (2)	
	Coefficient	t statistic	Coefficient	t statistic
Constant	-17.16***	-29.49	-19.47***	-10.97
Real effective exchange rate	0.59***	6.76	0.14	0.49
GDP	1.55***	43.66	1.91***	8.22
Adjusted $R^2$	0.9763		0.9516	
Sample (adjusted)	1996Q1–2009Q1		2000Q4–2007Q2	
No. of observations	53		27	

Source: Ha, Lee, and Sumulong (2010).

a. Coefficients on differences and lagged differences are not shown in the table.

\*\*\*Significant at the 1 percent level.

\*\*Significant at the 5 percent level.

\*Significant at the 10 percent level.

is much smaller than the income elasticity. The first column corresponds to equation 7-2 with the full sample. The results show that a 1 percent appreciation in the Republic of Korea's real effective exchange rate raises imports by 0.59 percent, whereas a 1 percent increase in the Republic of Korea's GDP raises imports by 1.55 percent. Moreover, as seen in the second column of table 7-2, the effect of the exchange rate again becomes insignificant if one considers the noncrisis period.<sup>10</sup> During the noncrisis period, exchange-rate appreciation did not increase domestic demand; the share of private consumption declined continuously, regardless of the direction of the won's value.

These results suggest that exchange rates may not have a significantly meaningful impact on exports and imports in the Republic of Korea; however, immense shocks such as financial crises do affect net exports. Moreover, the magnitude of the exchange-rate elasticity is smaller compared with variables such as world GDP or the Republic of Korea's own GDP. These results are consistent with the findings of other research. For example, Y-I. Choi and J-R. Choi (2009) have shown that the effect of exchange-rate changes on exports and imports has diminished since 2000. This is partly owing to a significant weakening in the exchange-rate pass-through effect for export products, as more intermediate goods are outsourced globally. Similarly, Y-B. Kim and B-J. Kwark (2009) have shown that the effect of exchange rates on exports and investment has weakened significantly since the Asian financial crisis.

10. The Dubai crude oil price was also considered as an additional determinant of Korean imports. The coefficient of the Republic of Korea's real effective exchange rate, *reer*, increased to 0.40 in the estimation with the full sample but remained insignificant in the noncrisis sample.

Table 7-3. *Pairwise Granger Causality Tests for Net Exports and Services Account Balance, Republic of Korea, 1980–2009*<sup>a</sup>

Sample: 1980M01–2009M11

Lags: 2

<i>Null hypothesis:</i>	<i>Obs.</i>	<i>F statistic</i>	<i>Prob.</i>
SERVICES does not Granger Cause NX	357	1.07212	0.3434
NX does not Granger Cause SERVICES		16.2723	2.E-07

Source: Ha, Lee, and Sumulong (2010).

a. SERVICES stands for services account balance; NX is net exports.

Why did the appreciation in the Korean won not reach levels where net exports would disappear? This can be partly explained by a kind of dollar-recycling mechanism that works as follows: the goods account surplus pushes up the value of the won, inducing Korean firms and households to buy more foreign services; this widens the services account deficit and keeps the value of the won from appreciating as much. There has been a clear shift in the composition of the current account balance. Before 1997–98, the goods and services accounts moved in the same direction. Shortly after the Asian financial crisis, however, the services account started moving in the opposite direction from the goods account. From 1999 to 2009, the accumulated goods account had a surplus of US\$283.8 billion, while the services account had a deficit of US\$117.3 billion. In other words, 41.34 percent of the goods account surplus has been offset by the services account deficit. Granger causality tests (table 7-3) confirm that the services account deficit follows the goods account surplus, and not the other way around.

What kind of services brought about the deficit in the services account? Travel and other business services account for most of the deficit. Travel includes not just tourism but also the money that goes to Koreans studying overseas. Other business services consist of merchant and other trade-related services; advertising; legal, accounting, and consulting services; and services between related enterprises.

The correlation between the goods account surplus and services account deficit may reflect a basic structural problem in the Korean economy: the weakness of the services sector, such as education and business services. If the services sector had been strong enough, domestic demand as a percentage of GDP would have been larger, and the Republic of Korea would not have had to rely so much on the external sector. The services account deficit would have been smaller, while the goods account surplus would not have been so large. This points to another kind of imbalance in the economy, that between the goods sector and the services sector. This imbalance is reflected not only in the external accounts but also in the internal imbalance in domestic industries, as discussed later in this chapter.

*Targeting Final Demand in Regional Markets*

The results of the empirical analysis in the previous section suggest that the potential role of the exchange rate in correcting current account imbalances is likely to be limited. In any case, exports have all along played a central role in the growth and development of the Asian Tiger economies. It is the export-oriented growth strategy that allowed the Asian Tiger economies to recover swiftly from the Asian financial crisis and facilitated their transformation into a surplus economy—that is, a net capital exporter. However, the very same strategy made the economies vulnerable to the 2008–09 global financial crisis. Overreliance on external demand made the Asian Tiger economies susceptible to a sharp fall in the industrial countries' appetite for imported goods. As mentioned earlier, huge declines in exports resulted in economic contraction in all four economies in the first quarter of 2009. In other words, though the export-led growth strategy adopted by these economies had for decades proved highly successful in delivering strong output growth, it has resulted in greater volatility in GDP growth rates. The challenge faced by policymakers in these economies is to dampen the business-cycle fluctuations that were accentuated by recurrent shocks from the external environment. A key way to increase the resilience of an economy against exogenous shocks is through the diversification of its export markets.

The Asian Tiger economies had long diversified their trading partners, as reflected by the myriad free trade agreements they had entered into. In particular, the Asian Tiger economies had steadily increased trade with regional partners over the past decade. It is well recognized that the increase in intraregional trade in Asia was spurred by the global integration of the PRC's economy.

Table 7-4 shows, for each Asian Tiger, the six most important trading partners based on bilateral exports trade data as well as the share of total exports each accounted for in 1990, 2008, and 2011. We observe from the table that, without exception, the regional economies, particularly the PRC, gained importance as trading partners of the Asian Tiger economies. However, the rise in intraregional trade can in large part be attributed to the growing intensity in vertical intraindustry trade in Asia. The Asian Tiger economies are well integrated in the regional production networks, which were strengthened by the emergence of the PRC as a manufacturing powerhouse. Specifically, these economies supply high-value intermediate components to the PRC for further processing and final assembly. The export profiles of the Republic of Korea, Singapore, and Taipei, China are similar—their export baskets weigh heavily on electronics components such as semiconductors and printed circuit boards bound for the PRC, the information technology assembly hub. In other words, trade flows with the regional countries are dominated by trade in parts and components rather than trade in final products.

Owing to the emergence of production networks, trade statistics no longer accurately reflect the dependence of Asian countries on extraregional demand. Gabor Pula and Thomas Peltonen (2009) used an updated Asian input-output



Table 7-4. Key Export Markets as Share of Total Exports, Asian Tigers, 1990, 2008, and 2011

Percent

	1990		2008		2011	
	Market	Share	Market	Share	Market	Share
Hong Kong, China	People's Republic of China	25	People's Republic of China	51	People's Republic of China	46
	United States	24	United States	11	United States	11
	Germany	6	Japan	4	Taipei, China	4
	Japan	6	Germany	3	Switzerland	3
	United Kingdom	4	United Kingdom	2	Singapore	2
Republic of Korea	Singapore	3	Singapore	2	Japan	1
	United States	29	People's Republic of China	25	People's Republic of China	24
	Japan	19	United States	11	United States	10
	Hong Kong, China	6	Japan	6	Japan	7
	Germany	4	Singapore	4	Hong Kong, China	6
Singapore	Singapore	3	Hong Kong, China	4	Singapore	4
	United Kingdom	3	Germany	3	Taipei, China	3
	United States	21	Malaysia	13	Malaysia	12
	Malaysia	13	Indonesia	11	Hong Kong, China	11
	Japan	9	Hong Kong, China	11	Indonesia	10
Taipei, China	Thailand	7	People's Republic of China	9	People's Republic of China	10
	Hong Kong, China	6	United States	7	United States	5
	Australia	2	Japan	4	Japan	4
	United States	32	Hong Kong, China	13	People's Republic of China	27
	Hong Kong, China	13	United States	12	Hong Kong, China	13
Singapore	Japan	12	Japan	7	United States	12
	Germany	5	Singapore	5	Japan	6
	Singapore	3	Republic of Korea	3	Singapore	6
	United Kingdom	3	Germany	2	Republic of Korea	6
						0.4

Source: Asian Development Bank, *Key Economic Indicators* database, 1970–2010; 2011 data from respective economies' statistics databases.

table to show that Asia has not decoupled from the rest of the world.<sup>11</sup> In fact, a study by the Asian Development Bank (2007) estimates that only about a third of the final demand composition of Asia's exports in 2006 can be accounted for by the region. Hence, it is not surprising that the recent collapse in demand of the end markets was transmitted to these economies involved in the different stages of the production process, resulting in the synchronized fall in trade. Not unlike the other Asian economies, the Asian Tiger economies are still heavily dependent on U.S. and the European Union markets in terms of final demand. Consequently, the economic prospect of the Asian Tiger economies remains coupled to the upswings and downturns in the developed markets.

To reduce the vulnerability of export growth to demand shocks from the extraregional markets, the Asian Tiger economies need to gear their trade structure in terms of trade in final goods away from excessive dependence on the U.S. and eurozone markets toward regional markets. The aim would be to have intraregional trade based on trade in final products as an additional source of demand and growth for these economies. This means that intraregional trade should also be driven by consumption rather than by production alone. In this regard, the level of private consumption in Asia is likely to increase in view of rising affluence and standards of living in the fast-growing regional economies. In particular, the PRC offers some potential as a strong source of independent demand in view of the emergence of its large middle class with growing purchasing power.

An Asian Development Bank (2009) study provides evidence that domestic demand in the PRC is already starting to play a more prominent role in supporting exports from the Asian Tiger economies. In the study, total trade balance was decomposed into four major categories: basic products, construction materials, parts and components, and final goods. Since the figures for the first two categories are relatively small for the economies under consideration, we focus only on the last two categories in our analysis.

The PRC has been running current account surpluses with Hong Kong, China. This is not surprising given Hong Kong, China's role as a major transshipment center for the PRC's exports. Although the PRC also runs a trade surplus in final goods with Singapore, the magnitude is much smaller than the level of trade balance with the other three economies. By contrast, the PRC has been running current account deficits with the Republic of Korea and Taipei, China. Moreover, final goods are accounting for a growing share of the PRC's trade deficit with these two economies over time. The magnitude of these deficits is significantly higher for Taipei, China, reflecting its cross-strait trade integration with the PRC.

11. The same study found that Asia's exports account for only approximately one-third of its GDP, far below the 50 percent dependence indicated by trade data. The exaggerated export dependence is a result of the higher import content of exports that resulted from greater segmentation of the production process across the region.

Considering the probable shifts in the PRC toward a bigger consumption basket that is typical in a rapidly growing economy, trade in final goods will quite likely play a more important role in driving the increase in trade between the PRC and the Asian Tiger economies going forward.

### *Increasing Reliance on Domestic Demand*

Is there any room for the Asian Tiger economies to reduce dependence on export-driven growth and to rebalance their economies toward more diversified sources of growth? After all, a key component of the transpacific rebalancing strategy is to implement structural policies that increase domestic demand. By examining the expenditure patterns in each country's growth, we can explore the prospect of adopting a new growth model for the Asian Tiger economies that leverages more on the domestic economy.

We note at the outset that the size of net exports does not indicate the importance of foreign demand relative to domestic demand in an economy, particularly when there is a high propensity to import. Each domestic expenditure category, namely private consumption ( $C$ ), government consumption ( $G$ ), and investment ( $I$ ) (which comprises fixed capital formation as well as the increase in stocks), has its own import content. These import components are not shown separately but are aggregated and included in total imports ( $M$ ), which is, in turn, subtracted from total exports ( $X$ ) to produce net exports. Therefore, when considering drivers of growth, a better measure of the significance of external demand is the magnitude of total exports (rather than net exports) relative to the levels of domestic demand components.

To gauge the relative importance of foreign demand, we rewrite the standard national income accounting identity,  $GDP = C + G + I + X - M$ , as

$$(7-3) \quad C + G + I + X = GDP + M.$$

The left- and right-hand sides of equation 7-3 represent total demand and total supply in the economy, respectively. We see from equation 7-3 that an increase in any of the components of total demand could suffer from import leakage. An increase in  $C$ ,  $G$ ,  $I$ , or  $X$  would not only lead to higher production in that country but also increase production elsewhere (as reflected by an increase in imports). Although imports in themselves do not generate income in an economy, they are necessary to allow the country to export. Of course, imports are also critical for restoring external imbalances.

These economies are highly dependent on export demand, and the reliance on foreign demand has grown over the past decade in all four economies. In 2008 external demand accounted for 70, 29, 76, and 45 percent, respectively, of total demand in Hong Kong, China; the Republic of Korea; Singapore; and

Taipei, China. In the case of Hong Kong, China and Singapore, external demand dominates domestic demand because reexports account for a significant portion of their total exports, exceeding 90 and 30 percent, respectively.

The extent to which the drivers of growth can be recalibrated depends on, among other things, the leverage each demand component exerts on output growth. For small open economies, a 1 percent increase in external demand is likely to have a greater impact on GDP than a corresponding 1 percent increase in, say, private consumption. After all, an exogenous increase in export demand will not only raise GDP in the current time period but will also have second-round effects of inducing growth in the domestic demand components in future time periods. Moreover, as explained earlier, an increase in any component of domestic demand in such economies would tend to suffer from high import leakage. Hiroshi Osada (1998) provides estimates of the marginal propensity to import for Hong Kong, China; the Republic of Korea; Singapore; and Taipei, China of 3.1, 0.4, 1.5, and 0.6, respectively.<sup>12</sup>

With the exception of the Republic of Korea, fluctuations in GDP growth are closely associated with changes in external demand rather than changes in domestic demand. For instance, the dip in domestic demand growth in Hong Kong, China in 2005 did not make a significant dent in its GDP growth in that year. Similarly, the upsurge in domestic demand in 2008 in Singapore—which is largely a result of a jump in government consumption—did not seem to have any discernible effect on its GDP growth in that year. In sharp contrast, movements in GDP growth in the Republic of Korea do not closely follow the fluctuations in external demand but are significantly influenced by developments in domestic demand. As for Taipei, China, there is insufficient deviation in the pattern of fluctuations between domestic demand and external demand, so that we are unable to distinguish which is dominating GDP growth.

These findings are not in the least surprising when we consider the population size of the two city-states Hong Kong, China and Singapore, which in 2008 are only 7 million and 4.8 million, respectively. In other words, added to the problem of high import leakage, domestic demand in both these economies lacks the scale to drive output growth. These observations seem to attest to the fact that a domestic-led growth model is clearly unsuited for ultra-small open economies such as Hong Kong, China and Singapore. In comparison, the 2008 populations of the Republic of Korea and Taipei, China are 48.6 million and 23 million, respectively. Hence, there is greater potential for these two larger economies to have domestic-led growth.

12. The marginal propensity to import exceeds unity for Hong Kong, China and Singapore owing to the high proportion of reexports. The propensity to import goods for domestic production or consumption in Singapore is estimated to be around 0.8 (Peebles and Wilson 2002), while the propensity to import in Hong Kong, China, calculated from retained imports using more recent data, is approximately 0.5.

Table 7-5. *Employment in Services and Manufacturing Sectors as Share of Total Employment, Republic of Korea, 1970–2010*

	1970	1980	1990	1995	2000	2005	2010
Services	34.3	38.6	47.7	54.8	61.2	65.2	57.7
Manufacturing	14.2	22.7	27.9	23.6	20.3	18.5	17.6
Other	51.5	38.7	24.4	21.6	18.5	16.3	24.7

Sources: Data from Organisation for Economic Co-operation and Development ([www.oecd.org/statistics/](http://www.oecd.org/statistics/)) and Korean Statistical Information Service (<http://kosis.kr/eng/>).

### Addressing Imbalances in the Republic of Korea and Taipei, China

In comparison with Hong Kong, China and Singapore, the relatively large population sizes of the Republic of Korea and Taipei, China suggest more room for policy maneuvering with regard to increasing reliance on domestic demand in these two economies. Policy recommendations targeted at boosting domestic demand should be implemented to a greater extent in these two larger economies. Hence we focus our discussion in this section on the Republic of Korea and Taipei, China.

#### *Republic of Korea: Internal Imbalances between Manufacturing and Services*

As noted earlier, the imbalance between the manufacturing and services sectors is reflected in the behavior of the goods and services accounts.<sup>13</sup> The weakness in the services sector is also reflected in its labor productivity trends. Table 7-5 shows that the employment share of services in the Republic of Korea has been increasing over time—from 34.3 percent in 1970 to 65.2 percent in 2005. However, services' share of value added has not been increasing at the same rate, rising from 44.29 percent to only 58.96 percent during the same period.<sup>14</sup> This means that the labor productivity of the services sector has been decreasing over time. An analysis by Jong-Wha Lee (2005) has shown that while the manufacturing industry has enjoyed high productivity growth over the past few decades, Korean service industries, including the finance, insurance, real estate, construction, wholesale and retail trade, and restaurants and hotels sectors, have had little growth in productivity.<sup>15</sup> The weakness in the services sector can be attributed to both

13. This subsection draws from Ha, Lee, and Sumulong (2010).

14. These figures are for current prices. If constant prices are used, the changes in services' share become even smaller.

15. Lower productivity growth in the services sector relative to the manufacturing sector has been established since the seminal paper by Joe Baumol (1967). Increasingly unbalanced growth across sectors induces labor force reallocation toward stagnant sectors, which might eventually slow down aggregate GDP growth. That the Korean service industries have had relatively lower productivity growth is therefore not extraordinary. Nonetheless, the labor productivity growth differential between services and manufacturing has been much larger in the Republic of Korea than in other industrialized economies (see Lee 2005).

knowledge-intensive services—in particular, education and business services—and traditional services.

In education and business services, which are directly reflected in current account balances, the problem lies in the shortage and poor quality of supply. Although the shares of education and business services in value added have been increasing in nominal terms, these shares have actually been declining in real terms (that is, increases have resulted mainly from rising prices). From 1995 to 2008, education's share in value added increased from 4.94 percent to 6.52 percent in current prices but decreased from 6.97 percent to 5.80 percent in constant prices. Business services give a similar picture: value added in current prices increased from 3.98 percent to 5.42 percent but decreased from 4.97 percent to 4.87 percent in constant prices during the same period.

The Republic of Korea's education problem is complicated and goes beyond the scope of this paper. However, the huge number of Koreans studying abroad suggests that the Republic of Korea's education services cannot meet domestic demand. Korean students make up the bulk of overseas students in the United States (127,185 students in 2008, or 14.8 percent of the total), Canada (27,549 students in 2005, or 15.4 percent of the total), and the PRC (80,000 students). The story is similar in Australia, Japan, New Zealand, and the United Kingdom. Given the size of the Republic of Korea's population—about 50 million—these levels are rather surprising, and it is not difficult to guess how much money goes to these overseas students. Similarly, the supply of business services has been insufficient. In terms of value added, business services represented only 5.6 percent of GDP in 2005, compared with 11.5 percent in the United States and 7.7 percent in Japan. Employment in business services gives a similar picture: 6.8 percent of the Republic of Korea's workers are in the business services sector, compared with 11.7 percent in the United States and 10.5 percent in Japan.

By contrast, the supply of traditional services is more than sufficient. However, labor productivity in this sector is also relatively low. The productivity of the wholesale and retail trade sector and the restaurants and hotels sector was only 22 percent of producer services in 2003. The productivity of social and personal services was also low, amounting to only 43 percent of producer services. This is a result of too much supply and too little demand.

The excess supply of traditional services arose from efforts to restructure the economy after the financial crisis. Most of the workers who were laid off shifted to the services industry, opening small restaurants and laundry shops or becoming taxi drivers. For example, the employment share of the restaurants and hotels sector increased from 9.46 percent in 1995 to 10.6 percent in 2008, though its share in value added (in current prices) decreased from 2.65 percent to 2.39 percent. Meanwhile, the shortage of demand for traditional services has a lot to do with the declining income share of households. The share of households and private unincorporated enterprises in national income fell from

74.20 percent in 1996 to 64.09 percent in 2008. This drop of about 10 percentage points in household income has eroded the most important basis for domestic consumption.

Corporate savings have been rising in the Republic of Korea. Reducing corporate savings and raising the corporate investment rate, particularly in the services industry, may help reduce internal imbalances if these foster restructuring within the services sector and raise the sector's productivity. Although the services sector's share in the total economy has been gradually diminishing in real terms, it still remains the largest sector in the economy.

Nevertheless, the country remains heavily reliant on services imports. Since records have been kept, starting in 1980, surpluses in the services account have been recorded only twice, in 1982–89 and in 1998. Business services other than transportation and financial services account for the bulk of the deficits in the past few years. The Republic of Korea needs to further develop its services sector to shift to a domestically supported growth strategy. This issue is more complex than it seems, since the low productivity of the services industry is closely related to massive hidden unemployment created by economic restructuring after the Asian financial crisis. Moreover, raising the demand for traditional services will require improvements in the share of household income. Since 88 percent of workers were employed by small- and medium-size enterprises (SMEs) as of 2005, promoting investment in these businesses will be critical.

To raise investment rates, the productivity of investment will have to be improved. Raising the productivity of SME investment, particularly in the services industry, where about 70 percent of workers are employed, will be important to rebalancing the Korean economy both internally and externally. This will require a reduction in widespread entry barriers in knowledge services and reforms to address the inefficient structure of traditional services. Investments in knowledge services such as education and business services should focus more on how to cope with growing global competition, whereas investments in traditional services should focus primarily on industry restructuring and reallocating excess workers to productive sectors.

The emergence of a large and rapidly growing urban middle class will be crucial to increasing domestic demand. The expansion of the middle class will hinge on the dynamism of enterprises, especially SMEs. Increasing investment by SMEs will help reduce the internal imbalance between savings and investment. Further improvements in the investment climate are necessary to encourage greater investment and boost domestic demand. The upgrade in the Republic of Korea's Doing Business (World Bank 2010) ranking for 2010 is largely owing to improvements in business startup procedures. Specifically, the number of procedures and the number of days required to start a business have been reduced. The minimum capital requirement and cost of starting a business have also been cut. The effects of these changes are expected to positively affect investment in the near term.

*Taipei, China: Economic Integration with the PRC*

The Taipei, China economy, which grew at a rapid 9.2 percent year-on-year in the fourth quarter of 2009, has not only returned to precrisis growth levels but has also outperformed the other three Asian Tiger economies, whose corresponding growth figures are 2.6, 6.0, and 3.5 percent for Hong Kong, China; the Republic of Korea; and Singapore, respectively.<sup>16</sup> Interestingly, the PRC featured prominently in the rapid recovery of Taipei, China, even as exports of final goods to the PRC increased from 17.8 percent of total exports at the start of 2009 to 29.2 percent in January 2010. Exports for final consumption in the PRC have been accounting for a growing share of the PRC's trade deficit with Taipei, China over time. This reflects the increased penetration of Taipei, China's goods in the PRC's markets. Indeed, economic linkages between these two economies have proliferated since the 1990.<sup>17</sup> However, official figures tend to underestimate trade and investment flows between the two economies owing to various cross-border restrictions and political reasons. Taipei, China's trade with and investment in the PRC have all along been partly intermediated through third parties such as Hong Kong, China; Japan; and Singapore. For that matter, Hong Kong, China also serves as a key intermediary to the rest of the world for the PRC's external trade via reexports and offshore trade, as well as for raising international capital in the form of foreign direct investment, equity and bond financing, and syndicated loans to finance the PRC's economic boom.

Yin-Wong Cheung, Menzie D. Chinn, and Eiji Fujii (2003) assessed the degree of real and financial integration between Taipei, China and the PRC (as well as Hong Kong, China) by testing for real interest rate parity, uncovered interest rate parity, and real purchasing power parity. The authors found that these three parity conditions do hold over the long term, thereby providing empirical evidence of real and financial capital mobility as well as goods market integration between Taipei, China and the PRC, notwithstanding the presence of various forms of trade barriers and capital controls. As these impediments continue to be lifted, Taipei, China will gain economically through further integration of its economy with the PRC. Zhi Wang (2003) used a computable general equilibrium model to show the positive effects of a free trade area in the region comprising the PRC; Hong Kong, China; and Taipei, China. Furthermore, Zhaoyong Zhang and Kiyotaka Sato (2007) found increasing structural symmetry among these three economies, which raises the potential of the region to become a candidate for monetary union. Taipei, China is likely to continue intensifying its economic integration with the PRC, which will concomitantly reduce its dependence on extraregional markets, thereby aiding in global rebalancing.

16. All the year-on-year growth rate figures are flattered by a low base effect.

17. See Zhang, Xu, and Bin (2003) for a discussion of these linkages from a dynamic economic and political perspective.



## Policy Issues Pertaining to Rebalancing

We conclude this chapter by identifying policy options that apply in general to all the Asian Tiger economies attempting to rebalance their economies. It is important to note at the outset that boosting domestic demand through structural reforms in these economies would not necessarily require that they abandon the export-led growth strategy or turn back from economic openness. Rather, it is a policy imperative for the Asian Tiger economies to remain open to trade and capital flows for the following reasons: First, exports and output often mutually reinforce each other. For instance, exports are known to enhance long-run growth potential by accelerating the process of human capital accumulation, which in turn fosters growth (see Chuang 1998). Second, with reference to endogenous growth models, imports also tend to have a positive impact on labor productivity. It is well recognized that imports act as an important channel for foreign technology and knowledge (Grossman and Helpman 1991). Third, retaining a degree of openness would encourage foreign direct investment inflows that contribute to domestic economic growth through channels such as the injection of greater competitive forces, the introduction of managerial innovations, and the restructuring of underperforming firms.<sup>18</sup>

Notwithstanding the need to remain integrated with the world economy, it is in the interest of the Asian Tiger economies to increase their resilience against a possibly protracted period of subdued global demand conditions. After all, the unwinding of the huge global imbalances will quite likely require a prolonged period of adjustment to the global structure of supply and demand. The resolution of the imbalances does not imply that the Asian Tiger economies should all attempt to achieve balanced current accounts. Rather, what is required are policies that facilitate a more balanced structure of demand and growth within the economies. Given the mismatch between what the Asian Tiger economies produce and what they consume, such rebalancing will require major adjustments to their underlying economic structure. The rebalancing of growth toward domestic demand will thus be a complex structural process that is both difficult and time consuming (Adams and Park 2009). Nevertheless, there is scope for policy adjustments in the Asian Tiger economies in view of their strong economic fundamentals, fiscal latitude, and sound financial systems.

Furthermore, as pointed out by Li (2002), the erstwhile largely complementary economic relationship between the Asian Tiger economies and the PRC—in the form of the former supplying capital while the latter provides cheap labor—

18. See Organisation for Economic Co-operation and Development (2002) for a review of empirical studies that show the positive impact of foreign direct investment on economic growth.

is likely to evolve into a more competitive relationship in the future as the PRC moves up the value chain and progresses to higher-value-added industries. This suggests the Asian Tiger economies would also need to identify new areas of comparative advantage as well as seek out new areas of complementarities, especially those that would help them reduce their reliance on extraregional demand.

As the income level in the PRC rises, there is a growing culture of consumerism, with shifts in spending patterns leading to higher consumption of luxury goods and services. For instance, strong demand from the PRC has been driving the recent recovery in the retail of branded watches and jewelry, while tourist arrivals in the Asian Tiger economies from the PRC have been growing rapidly (He, Cheung, and Chang 2007). In fact, this shift toward consumption whereby goods and services that had previously been regarded as luxuries are now viewed as necessities is also evident among the young urban generation in many traditionally thrifty societies in the region. The Asian Tiger economies should continue to position themselves to capitalize on such ongoing increases in intraregional demand by reorientating their economic structures to tap into the changing spending patterns of prospering Asian economies.

In this regard, the Asian Tiger economies could maintain their dynamic and niche-based competitiveness by focusing on services exports, particularly by building up ancillary capabilities. Services sector productivity in Hong Kong, China; the Republic of Korea; Singapore; and Taipei, China stands at approximately 84, 27, 58 and 53, respectively, on a scale of 1 to 100, where 100 represents the productivity level in the U.S. services sector. This suggests that there is ample room for further development of the services industry, and there is a need to eradicate existing policy distortions that favor the manufacturing industry.

Regulatory reforms in the services sector of the Asian Tiger economies would not only boost productivity in this sector but would also generate large gains in overall economic growth. Policy initiatives such as funding the upgrading of workers' skills and expertise would result in a more knowledgeable and experienced workforce that would enhance the quality of services. Moreover, policies that induce firms to innovate in their work processes and incorporate the use of technology would lead to the improvement of work practices. Business investments targeting higher-value-added exportable services industries, such as financial services, medical tourism, and tertiary education, should also be encouraged, perhaps by offering tax breaks and incentives for regional expansion.

Apart from tradable services, service sector companies in the Asian Tiger economies that provide lower-value homegrown services such as retail, food and beverages, and personal grooming should also be granted greater tax incentives and a reduction in start-up costs. These industries are important for the stimulation of local consumption, as they generate employment and income for the majority of the unskilled population. It follows that the long-held bias in favor of the

production of tradables over nontradables in these economies has to be reduced to bring about an increase in domestic consumer demand.<sup>19</sup>

Meanwhile, demand-side policies for reducing the imbalance between output and demand structures should aim at narrowing the income gap or at least arresting any further worsening of the income distribution.<sup>20</sup> In particular, wage levels at the lower end of the income scale should be raised to alleviate the financial insecurity felt by local residents. Of course, this should be matched by an increase in their productivity such as through retraining efforts. For instance, in the case of Singapore, the authorities have begun to slow the upsurge of low-skilled migrant workers as their hitherto easy availability removes the incentives for companies to upgrade and places downward pressure on wages of the lower-skilled domestic workforce.

A rise in household consumption brought about by a reduction in precautionary saving could also be induced through further development of the financial markets in Asian Tiger economies. For instance, a wider array of financial products could be offered to provide investment opportunities that give better rates of return. The provision of high-yielding saving vehicles would help raise household incomes. Moreover, the introduction of annuity products, health insurance schemes, and financial assistance programs for education would help ease the requisite level of saving for retirement, medical, and education purposes. Nevertheless, we note that in response to financial sector reforms in the aftermath of the Asian crisis, consumer credit expanded rapidly—particularly in the Republic of Korea and to a lesser extent in Taipei, China—leading to a jump in household delinquencies and nonperforming loans (IMF 2006a). Hence it is vital for the supervisory authorities to keep pace with new developments in the financial markets and to impose regulatory curbs on excessive consumer lending to ensure financial stability.

The economic integration of the PRC; Hong Kong, China; and Taipei, China economies is already taking place and is likely to intensify. In a similar vein, a way forward to advance transpacific rebalancing is to establish a common market within the region over the long term, as this will raise intra-Asian demand and investment (Kawai 2009). Combining markets in the region could prove to be an effective strategy, given that the Asian economies, with few exceptions, do not individually have the scale to transition from externally driven to internally driven growth. The market enlargement would also induce growth through greater competition among firms, which will lead to productivity gains, and

19. However, we are not advocating that the Asian Tiger economies adopt a new growth model whereby domestic demand consistently grows faster than output, as this would in the long term lead to unsustainably large trade deficits.

20. According to a study by the International Monetary Fund (2006b), the Gini coefficients for Hong Kong, China; the Republic of Korea; Singapore; and Taipei, China rose between 1995 and 2005, reaching 51.4, 33.1, 48.1, and 33.9 respectively in 2005.

through efficiency gains for consumers (both final and intermediate), owing to an increase in the range of product choice. Drawing on the European experience with the 1992 European Single Market Programme, measures that would need to be taken include the adoption of a trade liberalization program,<sup>21</sup> a lowering of the barriers to cross-border public procurement, enforcement of competition policy in all sectors, and elimination of hindrances to free movement of labor, capital, and services across member countries. Clearly, these initiatives will present many hurdles, such as historical legacy issues, territorial disputes, structural and institutional heterogeneity, and economic diversity. Nonetheless, the probable muted recovery in the advanced industrialized countries might just provide the necessary impetus to overcome the political, economic, and institutional challenges and accelerate efforts to establish a common market within Asia. Indeed, the Asian countries should make greater efforts to advance the establishment of a common market to better position themselves to benefit from the growing consumer and service demand in their own prospering region.

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21. At the current juncture, the PRC, Japan, and the Republic of Korea have each arranged a free trade agreement with the whole of ASEAN; the proposal here is to merge these bilateral arrangements into a regionwide free trade agreement.

\*The Asian Development Bank recognizes China by the name People's Republic of China

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