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Financial integration

‘Sit down, Shepherd Oak,’ continued the ancient man of malt. ‘And how was the old place at Norcombe, when ye went for your dog? I should like to see the old familiar spot; but faith, I shouldn’t know a soul there now.’

‘I suppose you wouldn’t. ‘Tis altered very much.’

‘Is it true that Dicky Hill’s wooden cider-house is pilled down?’

‘Oh yes – years ago, and Dicky’s cottage just above it.’

‘Well, to be sure!’

‘Yes; and Tompkin’s old apple-tree is rooted that used to bear two hogs-heads of cider, and no help from the other trees.’

‘Rooted? – you don’t say it! Ah! stirring times we live in – stirring times.’

‘And you mind the old well that used to be in the middle of the place? That’s turned into a solid iron pump with a large stone trough, and all complete.’

‘Dear, dear – how the face of nations alter, and what we live to see nowadays! Yes – and t’is the same here.’¹

People have always had to cope with the fact that the world around them is changing, and often in unexpected ways. This book deals with one aspect of change: how financial markets in particular countries in east Asia and the western Pacific have developed, become more open and integrated with the world, and what this has meant for the structure and operation of their economies.

In general terms, ‘integration’ is the process by which segmented markets become open and unified so that participants enjoy the same unimpeded access. It can occur through the removal of domestic and international controls on trade in the asset, good or service under consideration – for example, by implementing policies to deregulate and liberalise markets. Or it can occur simply by a reduction in the effectiveness of controls in a market – for example, by avoidance or non-enforcement. In either case, the key driving force for integration is the amalgam of the private interests of consumers, investors and financial institutions.

¹ Thomas Hardy, *Far From the Madding Crowd* (1874) (Harmondsworth: Penguin, 1978: 156–7).

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The integration of markets implies, on the face of it, an increase in transactions in those markets and a tendency for prices to converge in common-currency terms; integration can also radically change the dynamics of the market. Financial integration is simply the application of this process to markets in financial instruments. The integration of financial markets thus implies an increase in capital flows and a tendency for the prices and returns on traded financial assets in different countries to equalise on a common-currency basis.

The aim of this book is to assess the degree to which selected economies in east Asia and the western Pacific are becoming more financially integrated with the rest of the world, and to explore some of the implications of integration for fundamental economic structure in these economies. The first part of this chapter explains why the book focuses on east Asia and the western Pacific. The second addresses the question of why financial integration is of interest to people interested in understanding how the world works, and then outlines the structure of the book.

Focus on east Asia

The economies examined in this book are Australia, Hong Kong, Indonesia, Japan, (South) Korea, Malaysia, the Philippines, Singapore, Taiwan and Thailand. These countries are grouped together under the shorthand description of 'east Asia'. This grouping excludes Cambodia, China, Laos, Mongolia, Myanmar, North Korea and Vietnam which are obviously part of east Asia. These economies are not examined because much of the data required for empirical analysis is either not available for a sufficiently long period or else is not of adequate quality. Their exclusion should not be construed as meaning that they are unimportant, or that the insights gained in this study are not applicable to them. China, in particular, presents an interesting and important case in financial development and warrants a separate study. The grouping is also controversial in that it includes Australia, which is close to east Asia but is a geographically separate continent in the western Pacific. This rather technical observation ignores the fact that the Australian economy is deeply integrated with those of east Asia and that much of Australia's economic diplomacy is focused on east Asia. Indeed, as is apparent in governments' response to the financial crisis in Thailand and Indonesia in the second half of 1997, and in discussions about an umbrella organisation for east Asian central banks, it is increasingly standard to include Australia in a loose east Asian grouping.

This region is chosen as the object of analysis of financial integration for

a number of reasons. In the first place, it is a region of growing importance in the world economy and polity but the financial markets of its members have yet to be fully analysed. The ten countries are part of the Asia Pacific Economic Co-operation (APEC) group. They constitute a large economic area, accounting for about a quarter of world income and trade in the mid-1990s, up from about 11 per cent in 1970. The countries are also a dynamic group, with expanding intra- and extra-regional trade. There is a substantial body of applied research on trade and investment linkages in the APEC region and a growing body of literature on macroeconomic structure and policy. But the literature on financial structure and integration is relatively small, even if expanding. There is scope for contributing to this analysis in measuring the degree of integration of financial markets in the region; finance in east Asia has probably not been explored in as much detail as other issues since the quality and availability of data are generally lower than for trade and investment analysis. It is also more natural to focus, at least initially, on real variables since they are more obviously related to welfare. The consensus appears to be that financial development underpins rather than generates growth (Patrick and Park 1994), and so the proper focus, at least at early stages of development, is on the real economy and trade. In a similar vein, integration has been a major topic of analysis in Europe for decades but the focus on financial integration is only relatively recent.

There has also been substantial reform and growth in the domestic financial system and liberalisation of the capital account in many of these economies over the past decade, and this has occurred at a time when international financial markets have also changed notably. East Asian economies are, in their own right, interesting case studies on the effects of financial integration on macroeconomic structure and the implications for policy. More recently, of course, many of these economies have experienced a financial crisis, with sharp downward movements in asset and financial prices and economic contraction. The sources of these shocks need to be explained and the implications for financial reform pursued. At the same time, it is important to keep perspective, and so the discussion also includes a broader literature review of the costs and benefits of financial reform, with particular focus on east Asia.

The literature tends to be dominated by North American research and, while this has made a major contribution to the advancement of theoretical and applied economics, North American economists tend to focus on mainstream economies in constructing and testing theory. A different insight or perspective may be gained from examining smaller economies with different regulatory regimes and which are at different stages of

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economic development. To quote Solow (1986: S23), one 'of the few good ways we have to test analytical ideas is to see whether they can make sense of international differences in outcomes by appealing to international differences in institutional structure and historical environment'.

This is *not* to say that there is an 'Asian economic way' or that east Asian economies are inherently 'different' and not subject to the principles of standard economic analysis; the book in fact applies conventional analytical techniques to these economies. But the insights and views based on the experience of G7 economies should be examined in different regimes, and east Asia provides an exciting collection of economies with which to do this. As argued later, this analysis challenges some non-conventional views and enriches an understanding of the effects of repression and liberalisation on the real economy. In this context, it is worth noting that the focus here is financial integration *in* east Asia, not *of* east Asia. The focus of the former is on the openness of domestic financial systems to the rest of the world, the nuance of the latter is that there is an emerging east Asian financial grouping, such as a yen bloc. These two notions are distinct, and the focus in this book is clearly on the former.

Two of the foundations of the literature on integration are that integration is a *process*, and not an end in itself, and that there is no optimal region or integrated area other than the world itself (Cooper 1974); this is particularly so with financial markets. In this case, the process is the convergence of prices on financial assets throughout the world in support of the efficient allocation of capital. Restricting openness to a region rather than the whole world implies an inefficiency. The notion of the integration of east Asia seems to mimic the European literature and paradigm, which does focus on the integration *of* Europe. European analysts address issues such as which country dominates the regional monetary and financial system and how monetary union is to be achieved. It is possible to talk of Europe as a *deutschemark* bloc because European countries are aiming at economic convergence – that is, common economic growth, inflation and structural features such as budget and debt ratios – based on anchoring their economies to that of Germany. Despite the relatively high degree of economic interdependence in east Asia (Goto and Hamada 1994), integration of east Asian economies is not an issue, at least for the foreseeable future, since there is no aim to achieve convergence by structurally aligning and anchoring economies to Japan or any other regional economy. The focus is not on financial markets which are more open to some players or countries than to others, but on uniformly open markets. Accordingly, 'financial integration' and 'financial openness' are used interchangeably throughout the book.

Focus on financial integration

Much of the current discussion on financial integration is in terms of the interest of policymakers, but this growing interest has largely been motivated by what is happening in markets. It is reactive rather than proactive: it is a response to the private interests of consumers and investors and to the actions of financial institutions. It may well now be trite to say that the world is a smaller place, but the fact of the matter is that communications and technological advances over the past decade have radically changed access to information and markets and, consequently, business and personal strategies. The underlying force for integration is that people want freedom to make economic decisions and to access different forms of finance, risk management techniques and investment and portfolio diversification opportunities. It is now much easier to circumvent restrictions which people regard as inimical to their private interests, and this throws policymakers into a reactive role, forcing them to reassess their policy processes. While there is a focus in the book on the policy implications of financial integration, this should not detract from the assessment that much of the phenomenon is market driven.

There are several reasons why policymakers and economists focus on financial integration. In the first place, it is axiomatic that the macroeconomic policy mix depends crucially on the openness of the financial system (Fleming 1962; Mundell 1963). The more mobile is capital, the more substitutable are financial assets and the less flexible is the exchange rate, the more difficult it is for a country to set its interest rates independently of interest rates in the rest of the world. The degree of financial openness is an empirical question which needs to be resolved if policymakers are to know the structure of their economies and implement policies that will be effective in achieving their aims. This book seeks to present a simple and relatively general measure of financial openness.

One implication of integration is that the price of the good or asset is determined by the market, and economists generally argue that outcomes in competitive markets tend to be more efficient and equitable than otherwise. The degree of integration would seem to indicate whether there are efficiency gains to be had by liberalisation; the argument that financial integration promotes economic development and welfare is not, however, uncontroversial, and there are arguments that transitional costs can be high and that the gains from openness are overstated. The events of 1997 might be used to buttress these types of arguments. This book reviews the literature and presents new evidence to assess whether, and how, financial integration affects the real economy.

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Financial integration induces change in basic economic structure and in the operating environment for policy, business and households. This change can also make it confusing and difficult to determine what is happening in an economy in transition, and so some view is necessary on what happens to an economy when it liberalises its capital account. Liberalisation of the capital account in Korea, for example, has been impeded by concerns that international financial integration will stimulate capital inflows, induce an appreciation in the real exchange rate and thereby reduce international competitiveness (Dornbusch and Park 1994; Kim 1994; Park 1994). This book seeks to present a simple model of the real economy which can be used as a reference for interpreting changes in the real economy brought about by financial integration.

Finally, policymakers in APEC economies are interested in identifying the openness of markets as part of negotiating and defining an agenda of reform and liberalisation in the region (PECC 1995). This is particularly difficult for trade and investment in services, since it is hard to identify legal restrictions and impediments to market access in this sector. An alternative to identifying legal restrictions explicitly is to deduce the existence of restrictions by identifying outcomes which indicate restrictions. Moreover, even if legal restrictions can be identified, what is important to policy is whether these restrictions *matter* – that is, whether they affect outcomes. This book draws inferences about the openness of the capital account and domestic financial system based on tests of financial integration. As such, it complements and enhances work on impediments to trade and investment in financial services in the APEC region.

This book addresses a range of issues related to the measurement and analysis of financial integration. It does not seek to answer every question about integration, but it does address key aspects of financial integration by examining measurement of the phenomenon and exploring, both in theory and applied analysis, the implications of integration for the real economy.

The book falls into four parts. Chapter 2 starts with an analysis of recent events in east Asian financial markets and economies. The financial disturbances that affected these economies have had a profound effect on the macroeconomies in east Asia, and on the way people think about financial markets and reform. Chapter 2 examines what happened, and then tries to set out the fundamentals that lay behind the financial crises, assess some policy implications and review the literature on financial liberalisation more broadly, in order to put these events in some longer-term perspective.

The focus then shifts to broader conceptual issues associated with financial liberalisation. The second issue taken up in the book is the

measurement of financial openness. Chapter 3 reviews some of the summary measures of financial integration for east Asia, including the nature of legal restrictions that operate on the capital account of these countries, capital flows, interest rate relations, saving, investment and consumption relationships. Chapter 4 then examines international interest parity relationships in considerable detail. There are many different sorts of traded financial assets but it is not necessary to examine the interaction of domestic and foreign rates in all of these markets if their prices are linked through arbitrage in open markets. Hence, it is valid to assess integration by focusing on the prices in one market – which, in chapter 4, is the money market. Chapter 5 shifts the focus to the integration of domestic bank-intermediated markets with domestic money markets: even if money markets are internationally integrated, the impact of foreign monetary shocks on the home economy will depend on the extent to which *domestic* financial markets are integrated – that is, the extent to which changes in the prices of traded financial assets are transmitted to the prices of non-traded financial assets such as bank loans and deposits. (Chapter 7 takes a different tack, and looks at the effect of financial openness on consumption patterns.)

The third theme of the book is to understand more clearly the impact of financial integration on the real (as opposed to the financial) economy. Chapter 6 assesses the effects of financial integration on the real economy in the context of a two-good Ramsey model. The focus here is the effect of integration on the steady-state values of basic macroeconomic variables such as the real exchange rate, physical capital formation and net foreign liabilities. Chapter 7 looks at the effect of financial integration in a simple intertemporal model with demographic change, and assesses this model empirically. A model of intertemporal optimisation by an aging population with restricted access to financial markets is outlined and estimated.

The fourth stream in the book is to provide an overall policy assessment of financial integration. Chapter 8 summarises the results of earlier chapters and returns to some of the policy implications of integration discussed throughout the book; in particular, some implications for the operation of domestic policy and the relevance of consumption and debt for policy are examined.

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Developments in east Asia, 1997–1998

The extreme financial volatility in east Asian markets in the second half of 1997 and early 1998 needs to be explained and put into context. This chapter does this in four sections. The first summarises recent developments, describing what happened to key financial variables. The second examines the fundamental factors that lay behind these events. The third is an assessment of what these fundamental factors and financial market dynamics imply for financial liberalisation and reform policies. The fourth tries to put these events in a broader, more long-term focus, by reviewing the empirical literature on the costs and benefits of financial reform.

What happened?

In the second half of 1997 and early 1998, there was a severe loss of confidence in east Asian financial markets. Table 2.1 presents a chronology of events in markets over this period. The crisis began with a deterioration of confidence in the Thai baht that spread through to other markets in the region (IMF 1997a). The baht, which had been a currency pegged largely to the US dollar, came under selling pressure in early May 1997, as forecasts for economic growth weakened, on the back of a sharp excess supply of semiconductors, a rising current account deficit (fuelled in part by the baht being tied to the US dollar which had been steadily appreciating against other major currencies since mid-1995) and an emerging expectation of a rise in Japanese interest rates.

The fall in the baht revealed further, more fundamental, problems in the Thai financial system. In the first place, Thai interest rates were higher than US interest rates, and banks and other financial institutions in Thailand had borrowed in US dollars and lent these funds to Thai businesses and individuals without taking forward cover in the foreign exchange market. This meant that domestic borrowers had taken on a foreign currency risk, which became an actuality when the baht, contrary to general expectations, was floated and depreciated. On top of this, financial institutions

Table 2.1. *Chronology of events, May 1977–March 1998*

Date	Country	Comments
<i>1997</i>		
7 May	Thailand	baht under selling pressure
May	Thailand	introduction of selective capital controls and extensive forward foreign exchange intervention
2 July	Thailand	baht floated
11 July	Philippines	peso trading band widened, devaluation
	Indonesia	rupiah trading band widened, devaluation
13 July	Malaysia	Bank Negara Malaysia (BNM) stops defending the ringgit
18 July	Philippines	IMF approves US\$1bn loan to replenish reserves
11 August	Thailand	agreement reached on US\$17.2bn IMF-led financial package
14 August	Indonesia	rupiah floated
14 October	Thailand	financial restructuring package released; restrictions on foreign investment in financial sector relaxed
17–21 October	Taiwan	NT\$ devalued 7 per cent
22 October	Korea	intervention to support won
28 October		large share price movements around the world
31 October	Indonesia	US\$18bn IMF-led package announced
19 November	Korea	won trading band widened
end-November	Korea	operations of 14 merchant banks suspended; two commercial banks nationalised
3 December	Korea	US\$57bn IMF-led agreement announced
8 December	Thailand	two of 58 suspended finance companies allowed to reopen
16 December	Korea	trading band on won abolished
18 December	Korea	Kim Dae-Jung elected President
end-December	Korea	debt rollover negotiations commence
<i>1998</i>		
6 January	Indonesia	budget released
23 January	Indonesia	revised budget released
27 January	Indonesia	bank deposit guarantees and restructuring agency announced
January	Thailand	two-tier exchange rate system introduced in May 1997 abolished, allowing baht loans to non-residents
end-January	Korea	agreement to reschedule US\$24bn in short-term debt
end-January	Korea	10 merchant banks closed (25 per cent of assets) and flagged closure of a further 20 institutions
February	Korea	labour market reforms announced
February	Thailand	two banks taken over by the Financial Institutions Development Fund
February	Malaysia	statutory reserve requirement reduced by 3.5 percentage points to 10 per cent
25 February	Thailand	IMF agreement revised
26 February	Korea	two merchant banks closed (taking the number to 12, with 15 of the 30 institutions assessed to be financially viable)
4 March	Thailand	IMF loan instalment paid
early March	Indonesia	speculation about presidential and vice-presidential nominations
5 March	Indonesia	announcement that IMF package to be delayed from mid-March to April
9 March	Indonesia	speculation that the government would renounce IMF-led package

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(particularly merchant banks) had been increasing loans for real estate and shares, and as the economy started to slow on the back of a moderate weakening in fundamentals, real estate and share prices also fell. These assets had been used as collateral for lending by financial institutions and so weakened the strength of the financial system as a whole. The market's recognition of these fundamental problems in the financial system changed the credit risk associated with lending to Thailand, which induced a further portfolio shift away from Thai assets. As a result, the exchange rate fell further, which in turn compounded the problem. This pattern was repeated elsewhere.

These concerns about the Thai economy and currency caused a broader reconsideration of lending to other industrialising economies, particularly in south-east Asia (Indonesia, Malaysia and the Philippines) and Europe (the Czech Republic). In the face of this pressure, countries tried a range of measures to support their currencies. The Thai authorities had initially imposed capital controls on particular transactions and market participants in order to stop speculation which would force the currency to be devalued. These included restricting the access of foreign speculators to baht-denominated credits. Speculators had borrowed in baht and sold the currency in the expectation that they would be able to buy baht more cheaply after the currency had been devalued; by restricting the access of non-residents to baht, the authorities were able to increase the cost of maintaining baht positions. Indeed, interest rates in short-term offshore markets reached 1,300 per cent, forcing speculators to square their positions and buy baht, and the IMF reported that market losses were between US\$1bn and US\$1.5bn (IMF 1997a). The authorities also intervened actively in the foreign exchange market, with the loss of most of the Bank of Thailand's foreign exchange reserves. With few resources to defend the currency peg, the authorities floated the currency on 2 July and it immediately depreciated by 16 per cent.

The authorities elsewhere in Indonesia, Malaysia and the Philippines recognised that defending their currencies at the prevailing rates would only delay the inevitable, and so did not stand in the way of the market. They soon floated their currencies, which then depreciated substantially. There were broader spillovers in the region. The Singapore dollar depreciated, but more moderately. The Hong Kong monetary authorities were able to hold the peg of the HK dollar to the US dollar, largely because of the strong backing of foreign exchange reserves and the perception that the Chinese authorities would not devalue the renminbi. In October and November 1997, the Korean financial and economic system came under market scrutiny, because events elsewhere in Asia drew attention to the