PRIVATE AND CONFIDENTIAL

# A road-map for renminbi internationalisation

## The balance of risk and reward – policy considerations for China

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***Overview***

The debate about internationalising the Chinese renminbi is one of the most important issues in global politics and economics. Focusing on the power relationship between the world's two largest economies, the US and China, questions over the role and scope of the renminbi go to the heart of world politics and of the international trading economy.

It is time to overhaul the Chinese leadership's present piecemeal approach of announcing renminbi internationalisation moves in a step-by-step manner without placing them in a well-rounded political and strategic context. China's diagnosis of the international monetary system as essentially flawed is undoubtedly correct. Yet it is not enough for the Chinese leadership merely to say that the international currency system 'is a product of the past'. It is not sufficient for China simply to criticise the present set-up, as leading Chinese officials have done in recent years, without putting forward in greater depth and stronger detail proposals for improving the sub-optimal state of the world monetary order.

If China, for understandable and legitimate reasons, is dissatisfied with the present dollar-orientated system, then Beijing should put forward a convincing and comprehensive road-map as a means eventually of replacing it with something better. In view of the clear benefits the Chinese leadership and the world community can derive from progress in this sphere, China needs to design, promote and publicise a clear programme for full renminbi internationalisation in the next 10 years.

Such moves go well beyond mere technical issues, but they contain a large number of technical-sounding components:

- facilitating a move for the renminbi to become, over time, the No. 2 reserve and market currency after the dollar – with all the responsibilities (and some residual risks) that this entails
- allowing the renminbi to circulate with steadily greater freedom on foreign banking and financial markets and to be used in larger volumes and in a greater variety of international transactions
- progressively extending freedom for Chinese investors – both public and private sector – to invest abroad
- strengthening China's own financial markets and banking infrastructure in parallel with measures to allow foreign investors steadily increasing access to onshore investments
- explaining these policies thoroughly and carefully to the outside world.

***Balance between risk and reward***

Foreign politicians and participants on global financial markets generally understand that, in view of the dilemmas and strains surrounding China's political and economic position, the Beijing authorities must proceed with caution over the renminbi. The overriding thrust of macro-economic policy needs to ensure that such changes are both possible and sustainable. The prime consideration, from a Chinese point of view, is that risks are maintained under careful review and kept as low as possible.

The Communist party leadership is well aware that loss of monetary control was one of the reasons for the progressive weakening of the former Nationalist regime that led to the Communist takeover in 1949. The leadership also knows that international currency status brings problems as well as benefits for the issuing country.

The advantages are well documented. In past decades, foreign critics (especially from Europe, but also from developing countries) have regularly assailed the US for profiting from the alleged 'exorbitant privilege' stemming from the dollar's role as a reserve currency, which creates semi-automatic rewards for the issuer of reserve currency dollars and losses for the countries that end up holding them. By contrast, US policy-makers regularly opine that reserve currency status brings great responsibilities and burdens too – especially when this role is in decline or under threat, as witnessed by Britain in the 1960s and 1970s during the run-down in sterling's position as an international currency.

Moreover, one of the many reasons for the formation of the euro was that, over many years, the German government and the statutorily independent Bundesbank were highly reluctant to see Germany take on undue risks through the D-Mark's growth as a reserve currency. Instead, they wished this exposure to be attenuated by spreading it across a greater number of countries through a single European money.

Complete elimination of risk is impossible. Bolder policies would bring advantages, in both the political and economic fields. Particular attention needs to be paid to policy presentation. Enunciation of internationalisation moves hitherto by Chinese ministers and officials has often been half-hearted, incomplete and confusing. Such policies are not likely to further the Chinese precepts of stability, understanding and harmony; but rather, they risk producing the opposite result. Instead, a fully-thought out strategy is needed: for China's own good, and the world's.

***Foreign policy advantages***

High-level considerations of foreign policy play a strong part in these deliberations. If the measures are enacted in the right way, several inter-related advantages would flow.

First, and most broadly, such moves would set down a convincing and consistent framework for China's financial interactions with the rest of the world, corresponding to the full potential of its political, economic and monetary ambitions.

Allowing the renminbi – as part of a gradual, controlled process of liberalisation – to find its own level on foreign exchange markets would not only bring important overriding economic policy gains for the Chinese leadership. It would also mark a substantial Chinese advance towards maturity in international financial relations – a supremely helpful factor for relationships with the US, Europe and other fast-growing developing countries.

Second, the measures would signal progress in reforming the international monetary system by allowing, over time, the renminbi to co-exist with the other large reserve currencies, the dollar and the euro, as globally-important units of asset management and exchange. Such action would back up recent high-profile Chinese steps to support embattled European governments through purchases of their euro-denominated bonds.

As a side-effect, Chinese government authorities, banks and enterprises would have access to renminbi financing from foreign sources to help fund international and domestic activities in coming years.

***Domestic priorities***

In addition to these implications for China's international political and economic relations, such moves would help meet three down-to-earth domestic economic priorities.

First, enhancing the renminbi's external role would permit some of China's excess savings and pent-up demand for investments to be channelled abroad so as to support what is fast becoming Beijing's overriding policy preoccupation – reducing inflation.

Over-heated prices for domestic property and financial instruments are dangerous by-products of speculation that could destabilise the political system. Channelling abroad part of this enormous demand for domestic investments would be an important safety valve.

Second, by increasing the volume of renminbi-denominated instruments held abroad by Chinese residents, currency internationalisation would reduce the massive and unhealthy concentration on the central authorities as repositories of the country's foreign assets.

The unprecedented build-up of official foreign exchange reserves at the People's Bank of China and the State Administration of Foreign Exchange (SAFE), totalling $2.85tn at the end of 2010, is hazardous both politically and economically.

The investment in US Treasury securities, artificially increasing the US money supply and helping lower interest rates during the bubble years, added to the destabilisation of the world economy that sizeably contributed to the 2007-08 financial crash. Redistributing these investments and the heavy responsibility that goes with them among a larger range of public and private sector investors would be feasible, necessary and welcome.

Third, liberalising, extending and enhancing management of the country's foreign assets (in both renminbi and foreign currencies) would help prepare for the time when some of these assets need to be repatriated.

Although the sheer volume of China's foreign assets is large, the relative size is small compared with the Chinese population, as a comparison with other large reserve-holders in Asia such as Japan, Hong Kong, Singapore, Korea and Taiwan shows.

As part of a desirable rebalancing of the Chinese economy towards domestic economic expansion away from export-driven growth, China will almost inevitably have to draw down its foreign assets in coming years.

Establishing an appropriate and secure framework for managing and husbanding these assets in optimal fashion is a vital precondition for, in future, spending them wisely, for the good of the Chinese people.

### *Correcting international economic and financial anomalies*

Efforts to modify the skewed composition of world foreign exchange reserves and produce equilibrium more consistent with the needs of the international economy can only be beneficial. There is a pressing need to rectify the discrepancies between, on the one hand, the make-up of world trade and, on the other, the world's monetary and capital market balances.

The US accounts for roughly 10% of world exports, the European Union 16%, Japan 6.5% and China 12%. However, the currency composition of official reserves (according to IMF estimates based on countries that report the foreign currency composition of official assets) is skewed overwhelmingly to the dollar and the euro. Foreign exchange reserves are held 62% in dollars, 27% in euro and 3% in yen. The dollar percentage has fallen from 71% a decade ago, but the dollar's reserve status is far bigger than implied by trading patterns.

The anomalies are particularly evident in financial markets. The combined worth of the Shanghai and Shenzhen stock markets ranks fourth globally – well behind the front-runner, the New York stock exchange, but only marginally below the standing of the Tokyo Stock Exchange and the technology exchange NASDAQ. In addition, the combined turnover of China's futures exchange is already the largest in the world. However, because China allows only restricted channels for inward and outward portfolio investments, world equities and commodities prices do not fully take into account China's supply and demand, even though they are among the largest in the world.

Unless action is taken in the meantime, these discrepancies look likely to get bigger over the next decade. In 2020, assuming export growth matches GDP growth in key countries, the US will account for 7% of world exports, on Goldman Sachs projections, while the EU will have 11% and China 21%. All this indicates that the renminbi will have to play a much larger role in the price-setting process for capital and commodities markets.

### *Internal debate over renminbi exchange rate*

Reflecting all the above considerations, and especially worries about rising inflationary pressures caused by economic over-heating, a behind-the-scenes debate appears to be gaining in intensity within the top echelons of China's economic policy-making about the correct stance on the renminbi exchange rate, especially against the dollar.

Essentially, the struggle is between central bank technocrats leaning towards an appreciation of the renminbi to damp inflation, and domestically-orientated politicians who want to keep growth going at all costs. It would be sensible for the authorities to move towards the former position – following the pattern seen in Germany in the 1950s and 1960s, which in some ways shows important parallels to that in China half a century later. [See Appendix 1, p. 9.]

In spite of the substantial differences between German and Chinese developments – not least the discrepancies in living standards – the Chinese leadership is recommended to study the parallels with Germany as a guide to good policy-making.

The US authorities, for their part, should be encouraged not to exert undue pressure on China to shift in this direction, for fear of prompting resistance. A calming of the political exchanges between Washington and Beijing on this subject since summer 2010 seems to augur well in this regard.

### *At the centre-stage of global discussion*

The renminbi issue is far more than an academic or technical matter. In most of the other big themes of global discussion and conjecture, China takes centre-stage. Whether the outlook for world energy supplies; the pivotal but possibly declining role of the US as the sole superpower; perspectives for prosperity and governance in fast-growing developing countries; the relationship between Russia and the West; the fading position of Europe – in all of these issues, China's place is paramount.

All these questions are hotly pored over in government councils, parliamentary assemblies, think-tanks, seminars, talk-shows and newspaper columns around the world. Yet the destiny of the renminbi is usually reduced to the dry-as-dust stuff of technocrats and experts. In part this is a product of China's own reticence. The country hardly wishes to promote an active debate on a subject where its government is beset by extreme doubts about the right way to proceed.

As a developing country in the incongruous position of being both the world's second largest economy and the owner of the largest stock of monetary reserves, of which roughly two-thirds are thought to be held in dollars, China is torn in several different directions.

The reserves growth is the product of continuous trade surpluses accompanied by intervention by the People's Bank of China to hold down the renminbi rate (and thus support exports) through selling domestic currency against dollars. The build-up in reserves does not seem to have been planned, as is evidenced by numerous statements by Chinese officials over the years, whose normal response to the exceeding of a certain reserves total (such as the breaching of the $1tn level in 2006) has been to say: 'We now have enough.'

### *Differences in interpretation*

There are several different ways of interpreting China's reserves accumulation. On the one hand, it represents a symbol of strength. It appears to be a bulwark against foreign exchange outflows (and undue influence by foreigners) that have dogged China and other developing countries in the past. It is a potential instrument of political power-play vis-à-vis foreign governments. US government officials have been widely quoted as regarding this stock of reserves as an indication that China is now America's 'banker' and must consequently be treated with circumspection and restraint. But the reserves total is also a highly visible symbol of how China has kept the renminbi artificially low through intervention to buy dollars.

Inside China, the reserves stockpile is seen more as a source of weakness than a symbol of strength. The reserves build-up has attracted complaints among economists and monetary experts. Critics claim the huge pile of foreign currencies makes the country vulnerable to the whims of foreign monetary policy-makers and, especially, prevalent to America's profligate monetary policies and inflationary trends. This has been a strong background reason for the Chinese criticism of quantitative easing in the US to promote economic recovery.

Indeed, the Chinese and US monetary authorities provide the best example of the 'Stockholm syndrome' applied to international monetary affairs. Cloying dependence between hostages and hostage-takers in drawn-out abductions describes the symbiotic bonds between the US Treasury as the world's biggest debtor and the People's Bank as the world's largest creditor.

This essential ambivalence is well portrayed by the two-fold effects of reserves accumulation on the international role of the dollar. At one level of argument, the mercantilist aspects of China's dollar purchases have been a constant thorn in the side of the American Congress. By acting as a large-scale buyer of dollars from Chinese exporters and other foreign exchange counterparties, the People's Bank of China is regularly accused of acting against American interests by unfairly depressing its own currency and harming US exporters. However, paradoxically, through steady accumulation of dollars, the Chinese authorities have also been a major force shoring up the international position of the US currency, in a way that – if one accepts the 'exorbitant privilege' standpoint – benefits America.

Overall, Beijing has opted for a reserve build-up because it sees this as less unsatisfactory than the alternative of letting the renminbi rise and choking off export-led growth, threatening unemployment and possibly social unrest. However, Beijing has to concede that, by hitherto opting for what is sees as the lesser of two evils, it has partially counteracted its own campaign in favour of a more balanced system of world currencies.

For similar reasons of inter-dependence, Beijing has not carried out sporadic suggestions of large-scale sales of dollars to sanction the Americans for allegedly loose monetary policy. That would be an act of self-destruction. If China were to seek forcibly to lower its dollar stocks through large outright sales, this would weaken the dollar internationally and therefore lead to a substantial write-down of its reserves value in renminbi terms. The Chinese interest, therefore, must lie in a gradual modification of the international currency system, assisted by set procedures and milestones, as a key to reform that meets the needs of stability at home and abroad.

***Macro-economic background***

China knows that international reserve money status requires formidable preconditions. In a position (clearly, several years away still) of a stable multi-currency reserve system, the GDP of a new reserve currency area would need to be comparable to that of the dollar and euro. Financial markets would need to be deep, liquid and transparent. Supervision and regulation would need to be strengthened.

Banks, along with the rest of the financial industry, must be commercialised and opened up to domestic private as well as international investors. Monetary and fiscal policies must be sound, stable and responsible. The currency must be fully convertible. Domestic and foreign investors must have full freedom to trade assets across national boundaries. Foreign exchange markets must be well developed for investors to hedge exchange risks, yet currency rates must be stable enough to prevent speculative capital flows from becoming uncontrollable.

At the root of the challenge is the aim of modifying China's growth model and development strategy which relies strongly on the state-controlled financial sector and on fiscal measures to maintain an extremely high ratio of investment to GDP. This model is unsustainable and inconsistent with the aim of renminbi internationalisation.

Chinese leaders have accordingly decided to speed up transformation by shifting the emphasis of growth strategy away from exports towards domestic demand; away from labour, energy and resources towards technological innovation and human capital; and away from secondary industry towards the tertiary sector, led by services. The task for the authorities is to put these proposed domestic changes into the larger and still more important context of overhauling world money.

The key to achieving these objectives is financial deregulation to promote competition and innovation. Without consumer financing, for example, it will be impossible to build up a long-term mechanism to stimulate domestic demand. Without venture capital, private equity and many other financing measures, the road toward independent technology innovation and entrepreneurship will remain sealed. Without a liquid securities market, particularly for bonds, local governments will continue to rely on tax revenue and land-selling to finance their infrastructure investment and other expenditures.

Financial deregulation will above all require measures to open up the financial sector to domestic private investors. Domestic entrepreneurs must be allowed to operate banking, securities business, insurance, trust and other financial services. Domestic companies and local governments must have freedom to issue bonds which domestic and foreign investors can trade freely. Interest rates must be liberalised to create an equal playing field for all banks. A legal framework must be set to encourage innovative financial services such as venture capital and private equity.

The status quo is clearly a long way short of the desired circumstances. By the end of 2009, China's GDP accounted for only about 8% of the world's GDP, against 25% for the US and 22% for the euro area. The renminbi is only partly convertible, reflecting restrictions on capital flows. China's financial markets are extremely under-developed. China's financial sector is almost fully controlled by state-owned enterprises protected by prohibitive barriers to entry for both foreign banks and domestic private entrepreneurs seeking to participate in financial innovation. All these factors are part of a series of policies that need to frame the strategy on renminbi internationalisation.

***Linking together individual components***

A clear road-map that consolidates all existing measures into one strategic plan needs to embody several inter-linked components:

- encouraging use of renminbi in international trade, in settling both imports and exports with Chinese counterparties, as well as possibly in third-party trading
- allowing non-residents access to onshore Chinese investments
- permitting Chinese residents over time to build up investments abroad (in both renminbi and foreign currency)
- allowing Chinese residents (where warranted by balance of payments and other considerations) to raise funds on foreign markets (either for repatriation or for use abroad).

In practice, the Chinese authorities – often in close coordination with Hong Kong –- are already introducing distinct liberalisation measures in each of these fields, subject to appropriate regulations. Crucially, barriers remain in place to control money flowing in and out of the mainland for investment purposes, in line with what officials says are the needs of the 'real economy'.

China needs to take further steps to use Hong Kong's unique position to spur development of an international, liquid offshore renminbi market. The Chinese authorities can set targets for testing full renminbi convertibility in Hong Kong without bringing risks to the mainland market. With its own economic regulations and a highly developed financial system and culture of business, the territory is an ideal testing ground for renminbi internationalisation. Hong Kong's development as the offshore renminbi centre parallels the growth of London's Eurodollar market accompanying the internationalisation of the dollar in the 1960s and 1970s.

*OMFIF Official Monetary and Financial Institutions Forum*

***Onshore and offshore segments***

The authorities can experiment with further action for non-residents to access on-shore renminbi investments, along the lines of the scheme allowing offshore banks and institutional investors to invest into the mainland interbank bond market renminbi they accumulate through trade settlements.

As the pool of renminbi in Hong Kong increases in breadth and depth, leading to development of a nascent offshore renminbi asset market, it seems only a matter of time before sovereign government borrowers tap this pool – following on from issues from the World Bank and Asian Development Bank. One important Chinese step would be to encourage use of the renminbi in international bond issues by highly creditworthy foreign governments. (The US Treasury itself might be a candidate for such issues in coming years). This would be a positive and stability-orientated method of recycling China's current account surplus abroad in a way that does not build up unnecessary foreign exchange risks for Chinese creditors. [See Appendix 3, p. 11.]

The issuing activity could take place in both Hong Kong and Shanghai. There would an important side-effect in enhancing both the profitability of Chinese banks and Shanghai's status as an international financial centre.

Such high-grade renminbi bonds would be attractive assets both for private Chinese investors and for official reserve-holders abroad. Encouraging foreign debtors to borrow in renminbi rather than in dollars would lower China's potential currency risks inherent in large foreign exchange reserves. The corollary is clearly that foreign governments would be exposed to currency vulnerability as part of a rebalancing of risks and reward in international capital markets.

Such developments could run parallel with relaxation of restrictions on Chinese portfolio investment abroad as Chinese residents divert some of their large holdings in bank deposits to more attractive alternatives outside the country.

All this implies that China's banks and financial corporations should aggressively expand their services into foreign markets. Chinese individual investors and institutional investors should not simply be allowed, but should even be encouraged, to invest their money into foreign assets.

***Task ahead***

There is a now a large task for the Chinese authorities to bring together all the elements of a renminbi internationalisation strategy into a cohesive and realisable strategic road-map. This will then of course need to be implemented over several years; yet the first step is to assemble the package.

The undertaking is daunting, for a developing country has never before tackled a challenge of this kind. The environment is unforgiving: rising inflation at home, monetary volatility abroad, and, all around, reminders of the 2007-09 upheavals.

Yet the potential rewards are impressive: a more stable domestic economy, a better-balanced international monetary system, and a more resilient political and economic relationship between East and West. For all these reasons, the Chinese authorities should be encouraged to take the path of renminbi reform, on a journey that the rest of the world can see is supremely worthwhile.

**Appendix 1**

***Parallels with Germany in 1950s and 1960s***

China's recession-defying growth and fast-expanding foreign exchange reserves force financial markets to keep Beijing monetary policy under close surveillance.

History provides some important indicators as to what may happen next. And some principal clues are to be found not in Asia, but in Europe half a century ago. An intriguingly similar set of circumstances, combining the influences of war, revolution and state collapse with the complex international geopolitics of under-valued currencies, links the position of China today and that of West Germany in the 1950s and 1960s. The pro-growth politicians, for the time being, have been in the ascendancy in Beijing. But if the threat of an inflationary surge in China becomes more acute, the world may see a faction rising in power that is dedicated to lowering inflation through a higher external value of the currency.

There are parallels with the past. In the move towards eventual break-up in 1971-73 of the Bretton Woods fixed exchange rate system based on the dollar and gold, a pivotal episode was the landmark revaluation of the D-Mark in 1961. This was part of a series of events that led to the primacy of Germany in European economic policy-making, only a generation after the country's destruction in the Second World War – a sequence that bears some resemblance to China's economic rebirth after the strife of the Cultural Revolution.

The D-Mark revaluation in 1961 was preceded by bitter argument between the Bundesbank and the West German government led by legendary post-war leader Konrad Adenauer. Central to this development was the rise to intellectual pre-eminence within the late 1950s-Bundesbank directorate of a currency hawk, Otmar Emminger (who became the central bank's president for 2-1/2 years in 1977). [See Appendix 2, p. 11.]

Forging an alliance with Ludwig Erhard, the economics minister, Emminger marshalled a hard money faction in the Bundesbank who pushed through a revaluation that was initially opposed both by Adenauer and by Bundesbank president Karl Blessing – but was strongly backed by the US government under President John F. Kennedy who came to power in January 1961.

If history repeats itself, then an Emminger-like figure calling for a significant renminbi revaluation may rise to prominence within the Chinese leadership. Realisation will dawn in China that massive intervention to hold down the renminbi – similar to the enormous purchases of dollars by the Bundesbank in the late 1950s to prevent the D-Mark from rising – results in destabilising inflows of currency that the central bank cannot sterilise, or 'mop up', sufficiently quickly to stop rising inflation. The intellectual and political struggles are likely to continue for some time. Between the first D-Mark revaluation and the eventual breakdown of fixed exchange rates in 1973, a dozen years elapsed – punctuated by forced revaluations and frequent skirmishes between Germany and foreign governments (the US, Britain and France) on the 'right' policy on the D-Mark.

Of course, comparisons between West Germany and China should not be taken too far, in view of the large differences between their living standards and governmental systems. Additionally, the People's Bank is an arm of government, whereas the Bundesbank, in the form of its predecessor, the Bank deutscher Länder, had been given statutory independence in 1948, reaffirmed in the Bundesbank Law of 1957.

There is, however, one fundamental parallel between the two institutions. Both the People's Bank and the Bundesbank derive particular status from being set up (in 1948) before the birth of their respective states. (The People's Bank was established in December 1948 through the fusion of three separate banks, the Huabei Bank, the Beihai Bank and the Xibei Farmers Bank, while the civil war still raged that led to the promulgation of the People's Republic in October 1949. The Bank deutscher Länder was established by Germany's western occupying powers in March 1948 ahead of the birth of the Federal Republic in May 1948.)

In present-day China, there are several other echoes of monetary developments in West Germany in the 1950s. In both cases, the authorities were at pains to maintain an undervalued currency to promote exports and assist in large-scale domestic economic restructuring. Both West Germany and China had overriding social reasons for favouring exports.

In Germany's case, the under-valuation of the D-Mark helped promote the integration into the German economy of millions of refugees displaced from central and eastern Europe by post-war turmoil. In China, the renminbi's under-valuation has been part of an effort to prevent possible unrest from unemployment among the huge influx of rural peasants attracted into urban factories by rapid Chinese industrialisation.

The rest of the world, and in particular the American authorities, were content to turn a blind eye to the distortions building up as a result of massive German and Chinese trade surpluses. In the 1950s, the Americans were loath to see disturbance to the Bretton Woods system of fixed parities that would have caused a rise in the sacrosanct dollar price of gold and thus a devaluation of the US currency.

In the 2000s, the US – in common with the rest of the world – was content to see the outpouring of cheap Chinese exports prompted by the low renminbi as contributing to a worldwide lowering of inflationary pressures. This was a false illusion, as it turned out, since the fall in the inflation rate masked a dangerous build-up of asset bubbles that burst with the onset of the financial crisis in 2007.

The most striking parallel between the German and Chinese experience has been in the field of monetary reserves. In both cases, massive intervention on financial markets by West Germany and China to prevent their currencies rising against the dollar led to a huge rise of monetary reserves in the form of foreign exchange and gold at the central bank.

West Germany's reserves held by the Bundesbank showed a similar rise during the 1950s and 1960s to the upsurge in Chinese reserves in the first decade of the 21st century.

Although the absolute amounts for present-day China are much larger than in 1950s Germany, the relative positions are very similar. West Germany went from a collapsed pariah in 1945 to the world's largest reserve-holder by the 1970s. It then bequeathed to Japan the position as most important owner of foreign exchange – before China supplanted Japan in the last decade.

In view of Germany's and Japan's war-time defeat, these two nations were far more compliant challengers to US economic leadership than China is likely to be over the next decade.

## Appendix 2

### *The Emminger plan of 1959-60*

Otmar Emminger's 1959-60 currency plan combined five main elements – all of which have parallels in today's Chinese position:

- Monetary policy held the key to curbing the overheating of the West German economy, since corrections to budgetary policy by the Bonn government were unlikely to be forthcoming.
- Cooling the domestic economy by restrictive interest rate action would turn out to be self-defeating since it would further divert economic resources into exports and increase still further the country's trade surplus.
- Once of the main reasons for the overall distortions in the foreign exchange markets was the persistent US balance of payments deficit. Since this was unlikely to be corrected by American action, it was up to West Germany to take appropriate measures to end the distortion.
- If opponents of a revaluation won the day, the alternative would be a gradual increase in domestic prices and thus the ending of the competitive imbalance between Germany and the US through higher German inflation – which would seriously underline monetary stability.
- A D-Mark revaluation would be ideally brought about through multilateral currency realignment, but since this was highly unlikely to take place, the best option was unilateral action.

## Appendix 3

### *Liberalisation of D-Mark foreign bond market in 1970s*

A possible move in coming years towards sovereign borrowers raising funds offshore or onshore in renminbi would mark a similarity to expansion of borrowing in D-Marks through bond issues by foreign governments and corporations in Germany during the 1970s.

Particularly after the 1973 oil crisis, issuance increased markedly as the West German authorities liberalised the market to allow the Federal Republic's current account surplus to be siphoned off abroad, culminating in the landmark issuance of 'Carter bonds' in D-Marks by the US Treasury under the administration of President Jimmy Carter in 1979.

This was an excellent source of earnings for German banks, one that has greatly subsided since economic and monetary union in 1999, since German banks now share their previous D-Mark issuing monopoly with other banks throughout the euro area.