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RMB Trade Invoicing: Benefits, Impediments and Tipping Points

This paper analyses a survey of RMB invoicing awareness, use and expectations conducted on Australian and Chinese corporates. It considers the benefits of invoicing trade in RMB as well as a range of factors that would appear to be discouraging RMB use between Australia and China. It also identifies potential tipping points for increased RMB invoicing going forward.

This paper was prepared by Kathleen Walsh for presentation at the May 2014 Hong Kong Australia RMB Trade and Investment Dialogue. It draws heavily from a broader report on the Internationalisation of the RMB authored by Eichengreen, Walsh and Weir (2014). The Australian leg of the survey was implemented by the member banks of the RMB Working group, which was formed at the 2013 Dialogue. The paper has also benefited from input by Geoff Weir and contributions from the Reserve Bank of Australia. Funding for this paper was provided by the Centre for International Finance and Regulation (CIFR).

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CRICOS Provider No. 00120C

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Introduction

China has approached the internationalisation of the Renminbi (RMB) by taking cautious but deliberate steps towards a more liberalised economy. The intent to internationalise the currency is clearly expressed in China's five year plan and further endorsed by the 18th Plenum in 2013. However the pathways, sequencing and timing of internationalisation are the subject of considerable debate.

International trade links are well developed with China now the largest trading nation and set to be the largest global economy by the end of the decade. However financial links are still limited and the development of these links is essential for the internationalisation of the RMB¹. Therefore, with China's current account largely liberalised² but its capital account still subject to widespread capital controls, RMB trade invoicing is very important for the development of offshore RMB business. However, despite the rapid growth in RMB invoicing from zero in 2009 to over 20% of China's total foreign trade by the end of 2013 (see Chart 1) there is still a substantial gap between trade with China and settlement in RMB. Ito and Chinn (2013) find that the RMB is underrepresented as an invoicing currency (relative to peers) even after controlling for capital account restrictions. It is therefore essential to understand the potential for a currency to be used in invoicing in order to measure its ability to become an investment or a reserve currency³.

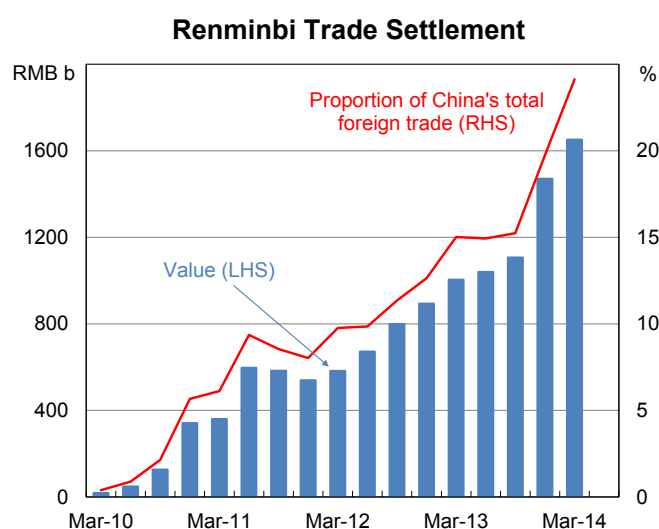


Chart 1: Growth in RMB Trade Invoicing (sources: CEIC data; RBA)

¹ See Eichengreen, Walsh and Weir (2014) for a thorough discussion of the expected pathways for the internationalisation of the RMB

² While full RMB internationalisation requires, among other things, the relaxation of capital controls, the current account transactions have been fully convertible since 2009

³ For a good discussion see Lai and Yu (2014)

International trade can be denominated in any currency: the importer's, the exporter's, or a third currency (also referred to as a vehicle currency). For trade between Australia and China, a considerable proportion is settled in \$US due primarily to the dominance of iron ore trade which is globally priced in \$US. However, the global pricing of commodities in one currency doesn't preclude invoicing or settlement in another - this is a choice made by the trade partners. Academic research has investigated the invoicing currency choice and provided theoretical arguments for the selected currency, including such factors as the relative bargaining power of trading partners, exchange rate volatility, product differentiation, transaction costs and industry structure⁴.

A fundamental component of the invoicing choice is the determination of who bears the exchange rate risk and there needs to be a convincing business case for a company to alter its invoicing currency. The main reason to settle trade in RMB is that overseas companies can potentially capture a price advantage with market estimates suggesting that Chinese corporates have typically added up to 5% to their quotes in foreign currencies, to hedge against unfavourable exchange rate movements⁵. If trade counterparties are willing and able to trade in RMB then this buffer can be eliminated, but then the exchange risk is borne by the offshore party. However the cost of hedging to some offshore parties would appear to be significantly lower than the hedging costs in China, reflecting the greater liquidity and interbank connections offshore. Therefore if the discount offered by a Chinese trade partner is between the cost of hedging in China and the cost for the offshore trading partner then both parties will benefit. This provides a compelling business case for trading partners to initiate a change to RMB invoicing. However if this case is so compelling, then why does RMB trade invoicing lag established trade patterns?

The literature on choice of invoicing currency emphasises the importance of "inertia effects": where once a currency is well established as a dominant invoicing currency, its critical mass may see its dominance continue beyond the economic dominance of the country. This is particularly true for use of the \$US which dominates pricing and settlement in part due to what Goldberg and Tille (2008) refer to as a coalescing effect. That is where firms minimise price differences relative to their competitors by adhering to the industry choice of invoicing currency. Therefore a decision to alter the invoicing currency can be considered a risky move away from the herd. However the literature also highlights the importance of "tipping points", whereby once a threshold level of invoicing for the currency of a rising economy is reached, its use can spread rapidly.

⁴ Ito and Chinn (2013) provide a good background to the theory of trade invoicing.

⁵ Standard Chartered (2014) suggest that companies can shave 2-3% off costs by invoicing in RMB whereas Swift (2012) note that the PBOC have been quoted as saying that importers could save between 2-3% by paying in RMB. Deutsche Bank (2012) reported that for companies paying exports in RMB the savings averaged 4.8%. The HSBC (2013) RMB Cross Border Trade Settlement Survey indicated that 53% of Chinese businesses would offer discounts of up to 5% for transactions settled in RMB

Survey of Australian and Chinese corporates

To get a better understanding of the degree of inertia and potential tipping points in RMB trade settlement, CIFR commissioned a survey in late 2013 of both Chinese and Australian companies engaged in China/Australia trade. The Australian survey was implemented by domestic and foreign banks on behalf of CIFR and the Chinese survey by Redfern Associates (a mainland China advisory firm) and Austrade⁶. The survey design was modelled on an earlier RBA survey⁷ and was augmented with the assistance of the RBA, Treasury and market participants through the RMB Working Group which was established at last year's Dialogue. The primary outcome of the survey is that there is enormous potential for growth in RMB settlement, in fact more than half of all survey respondents indicated that they expected their RMB use would increase in the next 5 years

Sample Description

There were 93 responses from Australia and 103 from China representing a wide range of industries and trading arrangements. A detailed sample description is presented in Table 1. Both the Chinese and Australian samples include a good cross section of importers and exporters and the split is relatively similar in both countries. The surveys captured a wide range of industries with the Australian survey featuring a substantial number of corporates trading in the industrial goods and services, mining and retail sectors. The Chinese survey included a significant number of corporates trading in the food and beverage, mining and industrial goods and services sectors and these firms conducted, on average, 34% of their total trade with Australia. In both surveys, firms were of varying size which was measured by number of employees and by turnover. The Chinese sample consisted of over 20% State Owned Enterprises (SOE's) and also included a significantly higher proportion of small firms than the Australian sample. Over 80% of all Chinese respondents were from firms based in China with a similar proportion of Australian based firms in the Australian sample. In addition, over 65% of all firms conducted business with external trade partners (rather than only intragroup).

The sample selection suffers from some bias as the Australian sample was selected by Australian and international Banks operating in Australia and most of the respondents were bank clients. This is likely to lead to higher levels of awareness in the Australian sample, as the banks are unlikely to have surveyed clients with no knowledge of RMB trade invoicing. In contrast, the Chinese sample was randomly selected without prior knowledge of the respondents' awareness of RMB trade invoicing.

⁶ The Austrade work was led by their Shanghai office, with support from regional offices.

⁷ Results of the RBA survey are reported in Ballantyne, Garner & Wright (2013)

Table 1: Sample	Description	Australia	China
Number of responses		93	103
Share with Australia		N/A	34%
Importer/Exporter	Importer	55%	61%
	Exporter	30%	25%
	Both	15%	15%
Intra-group/External	Intra-group	13%	24%
	External	68%	65%
	Both	19%	11%
Industry	Industrial G & S	21%	11%
	Mining	19%	14%
	Retail	11%	10%
	Food and Beverage	6%	30%
Home based		81%	80%
State owned		N/A	22%
Size by Employees	SME	57%	69%
	Large	43%	31%
Size by Turnover	Very Small	8%	31%
	Small	9%	19%
	Medium	34%	17%
	Large	49%	32%

Awareness

The respondents were asked whether or not they were aware of the ability to invoice and settle trade in RMB (results presented in Table 2). The most significant findings include that awareness in China was relatively lower than Australia with almost half of the small Chinese firms unaware of the opportunity to invoice and settle in RMB. Awareness was also low for the private Chinese firms whereas SOE's were considerably higher. However this is likely driven by firm size as the majority of the small firms in the Chinese sample were private. In contrast 93% of large private firms and 88% of large SOE's were aware of the ability to invoice in RMB. Although the China intra group sample were above the mean, there were still 20% of Chinese corporates with operations in Australia unaware of the ability to invoice in RMB. However, it is encouraging that 44% of the Chinese firms unaware of RMB invoicing indicated that they would consider using RMB in future.

These results are, in part, impacted by the higher proportion of small firms in the Chinese sample however the level of awareness in the Australian small firms was much higher. The results highlight considerable growth potential and perhaps the need for a targeted education campaign.

Table 2: Awareness	Detail	Australia	China
Overall awareness		98%	69%
Awareness by Importer/Exporter	Importer	96%	61%
	Exporter	100%	84%
	Both	100%	75%
Awareness by Intra-group/External	Intra-group	100%	64%
	External	96%	66%
	Both	100%	80%
Awareness by Industry	Industrial G & S	89%	73%
	Mining	100%	79%
	Retail	100%	90%
	Food and Beverage	100%	55%
Awareness by SOE	SOE	N/A	80%
	Private	N/A	64%
Awareness by Size / Turnover	Very Small	86%	53%
	Small	100%	50%
	Medium	100%	78%
	Large	98%	91%

Use

Consistent with the awareness levels, the use of RMB by small and medium firms was negligible in comparison to the use by large firms (results of RMB use detailed in Table 3). This was also the case for private firms with very low usage levels, whereas 40 % of SOEs reported that they had used RMB. In contrast to the awareness results, the use of RMB by large firms is dominated by SOE's with only 6% of large Chinese private firms reporting the use of RMB for invoicing and settlement. The variation by industry was evident in both the Australian and Chinese samples with mining firms reporting comparatively higher levels. Although over half of the Australian mining companies reported that they had used RMB trades, most reported that the proportion of these trades was very small.⁸

⁸ Many Australian mining firms noted that their invoicing and settlement in RMB only represented 1% of their total trade with China

This is consistent with reports from Australian firms and banks that some mining companies are actively examining the range and liquidity of RMB banking products in preparation for the possibility of being asked to invoice and settle in RMB. In addition, some of them are importing mining-related equipment such as rolling stock from China and are paying for it in RMB, providing them with a further incentive to trial or at least consider invoicing and settling their commodity exports in RMB to create a natural hedge.

The use of RMB by external trading partners appears to account for the only real take up by Chinese firms, with intra-group transactions very low. As noted earlier, a targeted education campaign would likely help to improve this take up. In contrast, Australian intra-group RMB transactions are relatively high at 83%.

Table 3: Use of RMB	Detail	Australia	China
RMB Use	Current	37%	12%
	Current share	24%	35%
	Ever	44%	13%
Use by Importer/Exporter	Importer	40%	11%
	Exporter	50%	24%
	Both	50%	0%
Use by Intra-group/External	Intra-group	83%	4%
	External	29%	18%
	Both	72%	0%
Use by Industry	Industrial G & S	47%	18%
	Mining	56%	43%
	Retail	20%	0%
	Food & Beverage	17%	3%
Use by SOE	SOE	N/A	43%
	Private	N/A	4%
Use by Size / Turnover	Very Small	29%	3%
	Small	75%	0%
	Medium	34%	11%
	Large	48%	30%

Benefits

All firms in the sample were asked to indicate the benefits of RMB invoicing and the results (Table 4) are consistent with expectations. The Australian firms indicated benefits that are predominately price and access related with the ability to accommodate Chinese trading partners ranking very high. On the other hand the benefits identified by Chinese firms are more related to reduced exchange rate risk and improved trade terms.

Table 4: Benefits	Australia		China	
All firms -	More favourable pricing	74%	Reduced foreign exchange risk	75%
Advantages of RMB settlement	Ability to accommodate Chinese companies	44%	Benefits from appreciation / depreciation	58%
	Improved relationships with Chinese trading partners	42%	Improved trade terms	48%

Disadvantages

Respondents also identified the disadvantages of RMB settlement and these are separated into respondents who have never settled in RMB and those who have (Table 5). The Australian firms who had never settled in RMB noted the costs of deviating from \$US contracts and the concern that trading partners would be unwilling to settle. This is particularly relevant for the mining sector in Australia, for whom in most cases both receipts and a substantial proportion of costs are in \$US.

Table 5: Disadvantages	Australia		China	
Disadvantages – Never RMB	Costs of deviating from \$US contracts	31%	Concerns over appreciation/depreciation	58%
	Partners unwilling to settle in RMB	31%	Trade partners unwilling to settle in RMB	50%
	Difficulty in accessing hedging products	27%	Lack of information	41%
Disadvantages – Use RMB	Uncertain process	37%	Concerns over appreciation / depreciation	62%
	Payment delays	34%	Payment delays	46%
	Chinese regulatory restrictions	32%	Banks unfamiliar with process	31%
			Uncertain process	31%

On the other hand, the Chinese respondents indicated that concerns over losing potential gains from currency movements were the main difficulty in RMB settlement. Respondents who indicated this concern were predominantly importers, probably reflecting an expectation of continued RMB appreciation. It is important to note that this survey was conducted in October 2013 in a period of sustained RMB appreciation. The recent volatility as evident⁹ in Chart 2 and the widening of the RMB trading band to 2% could instigate a re-assessment of invoicing choice and encourage more Chinese companies to negotiate to pass on the increased exchange rate risk to their offshore counterparties. In fact this was pre-empted by one Chinese respondent who noted that “Currency

⁹ RMB is low compared to other currencies but is relatively high compared to historical levels.

fluctuations would drive our organisation to change our trade settlement behaviour and favour RMB.”

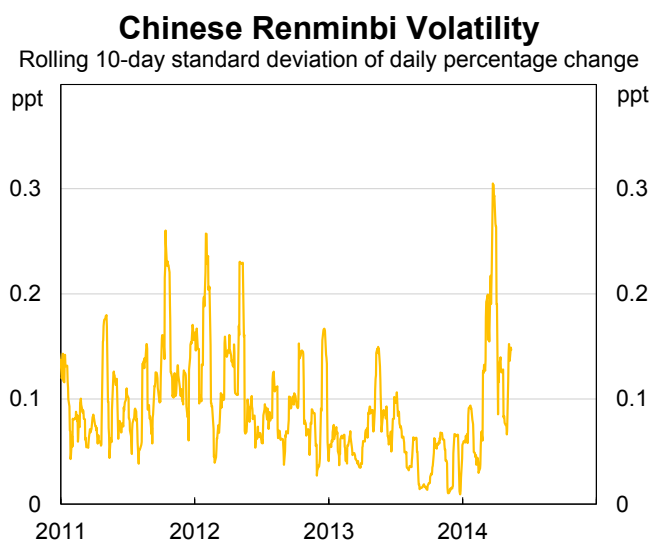


Chart 2: RMB Volatility (sources: Bloomberg; RBA)

Of the firms that had settled in RMB, both the Australian and Chinese respondents noted payment delays and uncertain process as a disadvantage with some making comments such as “lots of red tape and delays in dealings between banks” and “we have had many payments rejected”. However many remarked that the speed and efficiency of processing had improved substantially with one Australian respondent commenting that “Initially there was a major time delay before the beneficiary received the funds, this still exists but the number of days it takes to reach the counterparty has been halved.” Several were particularly positive such as “no difficulties encountered as the relevant authorities guided us through the process.”

Australian firms who had not settled in RMB noted that there was difficulty in accessing hedging products but this was not a concern for those who had settled in RMB. There are two interpretations for this. It could mean that firms that are not settling in RMB only perceive a difficulty in hedging (which is not actually present) or that hedging products are incomplete but firms settling in RMB have only limited needs for hedging products perhaps due to natural hedges within the firm.

Tipping points

One of the most striking results of the survey is that both Australian and Chinese corporates are waiting for the other to initiate a change. 70% of Australian corporates are waiting for Chinese firms to request RMB invoicing and 76% of Chinese corporates are waiting for Australians to accept it. The results reflect somewhat of a ‘waiting game’ where

each firm is waiting for the trading partner to take the lead. It is probably best captured in this response from a Chinese corporate: “Just because a new rule or policy suggests something has benefits, we all know that there may be hidden obstacles. So we wait ... to see how others get through it first.”

Although the Chinese corporates were waiting for the Australian trading partner to request or accept RMB only 28% expected their trading partner to encourage them to do so. In contrast 49% of Australian firms expected the push to come from China. In fact many corporates, both Chinese and Australian, indicated that Chinese government intervention was expected to initiate this change. Responses ranged from general comments such as “depends on government policy” to very specific “we will use RMB if our government requires us to do so.”

However there is also a sense of ‘testing the water’ with corporates trialling a small number of RMB trades. Several made comments such as “the first few trades were a leap of faith” and “given the first few deals went through successfully [our use of RMB settlement] will grow over the coming months”. It is likely that a few industry leaders moving to RMB settlement could pave the way for other corporates.

In addition, 37% of Chinese corporates aware of the ability to invoice in RMB indicated that changes to Chinese regulation on VAT and export rebates would make them increase their use of RMB settlement. It has been reported that VAT rebates on exports are more difficult to substantiate if the exports are invoiced and settled in RMB rather than a foreign currency. Perhaps some certainty around VAT rebates could be a driver for increased RMB settlement.

Product availability did not rank highly in the list of disadvantages for those firms with experience in invoicing in RMB, although, as discussed previously, it was listed as a concern for those without RMB experience. Nevertheless, the degree of concern about product availability appears to have diminished from the time of the RBA survey where 56% of Australian corporates were concerned about the inability to hedge exchange rate risk.

Reflecting on earlier points, an important tipping point is the need for greater awareness among Chinese SMEs and private firms as well as some industry specific guidance on the benefits of RMB settlement. An important awareness point is the cost of hedging especially in the wake of increased RMB volatility (Chart 2 above). If the transfer of hedging costs from China to Australia results in a win for both corporates then the benefits of RMB invoicing will become even more apparent in a period of high volatility. With the widening of the RMB trading band to 2% China appears to be continuing to move away from a system of managed appreciation and seems keen to allow greater RMB volatility. In the face of high derivatives-based hedging costs, this volatility is likely to encourage more Chinese companies to move to RMB invoicing.

Conclusion

As China's relative economic size increases, capital controls are gradually relaxed, and financial reforms are smoothly implemented, it seems inevitable that the RMB will become a major invoicing currency in the Asia-Pacific region.

However the inertia affecting invoicing currency choice suggests that we should understand the tipping points to greater RMB use and consider action where needed. Australian firms appear to be getting prepared for RMB invoicing with many firms testing the water with small trades. However Australian corporates expect the request for settlement in RMB to come from their Chinese trading partners. In contrast, awareness levels in China are relatively low, especially among small private firms, so the request may not be forthcoming. It would seem that raising awareness in China, especially highlighting the costs of hedging in a high volatility market, is necessary for the increased use of RMB in trade invoicing and settlement.

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