

# RENMINBI TRADE INVOICING: *Benefits, impediments and tipping points*

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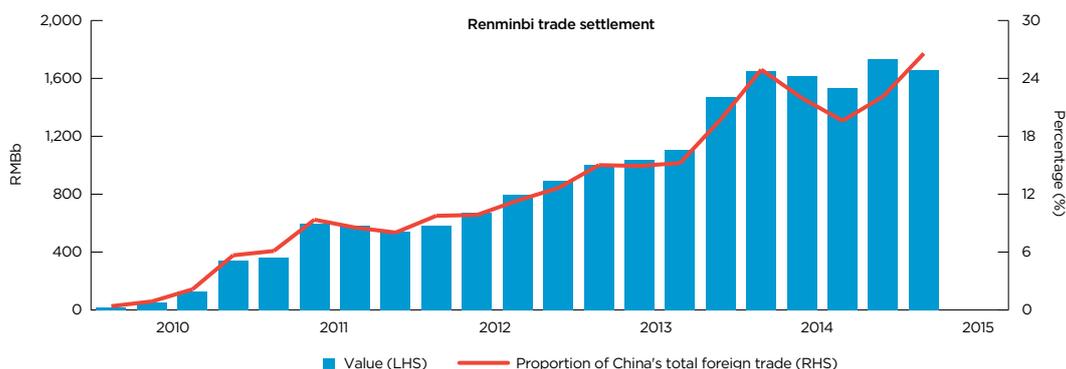
*This paper analyses a survey of Australian and Chinese corporates on renminbi (RMB) invoicing awareness, use and expectations. It considers the benefits of RMB trade invoicing as well as a range of factors that would appear to be discouraging its use in trade between Australia and China. It also identifies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

China has approached the internationalisation of the RMB by taking cautious but deliberate steps towards a more liberalised economy. China's intention to internationalise the currency was clearly identified in its 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 RMB.<sup>1</sup> Therefore, with China's current account largely liberalised<sup>2</sup> but its capital account still subject to widespread controls, RMB trade invoicing is very important for the development of offshore RMB business.

Despite the rapid growth in RMB invoicing from its commencement in 2009 to over 24 per cent of China's total foreign trade by the end of 2014 (see Figure A), there is still a substantial gap between total 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 currency.<sup>3</sup>

**FIGURE 1: Growth in RMB trade invoicing**



Sources: CEIC data; RBA.

A considerable proportion of trade between Australia and China 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 structure.<sup>4</sup>

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 per cent to their quotes in foreign currencies, to hedge against unfavourable exchange rate movements.<sup>5</sup> 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 for 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?

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The literature on choice of invoicing currency emphasises the importance of ‘inertia effects’: once a currency is well established as a dominant invoicing currency, its critical mass may see this 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. This suggests that a decision to alter the invoicing currency may 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.

### **Survey of Australian and Chinese corporates**

To get a better understanding of the degree of inertia and potential tipping points in RMB trade settlement, the Centre for International Finance and Regulation (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 Austrade.<sup>6</sup> The survey design was modelled on an earlier RBA survey<sup>7</sup> 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 finding of the survey was that there is enormous potential for growth in RMB settlement, with more than half of all survey respondents indicating that they expected their RMB use to increase in the next five years.

## Sample description

There were 93 responses from Australia and 103 from China representing a wide range of industries and trading arrangements (see 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 capture 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 beverages, mining and industrial goods and services sectors and, on average, these firms conducted 34 per cent of their total trade with Australia. In both surveys, firms were of varying size as measured by the number of employees and by turnover.<sup>8</sup> The Chinese sample consisted of over 20 per cent state-owned enterprises (SOEs) and also included a significantly higher proportion of small firms than the Australian sample. Over 80 per cent of Chinese respondents were from firms based in China with a similar proportion of Australian-based firms in the Australian sample. In addition, over 65 per cent of all firms conducted business with external trade partners (rather than only intra-group).

The Australian sample was selected by Australian and international banks operating in Australia and most of the respondents were bank clients. In contrast, the Chinese sample was randomly selected without prior knowledge of the respondents' awareness of RMB trade invoicing.

**TABLE 1: Sample**

Description		Australia	China
<b>Number of responses</b>		93	103
<b>Share with Australia</b>		N/A	34%
<b>Importer/exporter</b>	Importer	55%	61%
	Exporter	30%	25%
	Both	15%	15%
<b>Intra-group/external</b>	Intra-group	13%	24%
	External	68%	65%
	Both	19%	11%
<b>Industry</b>	Industrial	21%	11%
	Mining	19%	14%
	Retail	11%	10%
	Food and beverages	6%	30%
<b>Home based</b>		81%	80%
<b>State owned</b>		N/A	22%
<b>Size by employees</b>	SME	57%	69%
	Large	43%	31%
<b>Size by turnover</b>	Very small	8%	31%
	Small	9%	19%
	Medium	34%	17%
	Large	49%	32%

## Awareness

The respondents were asked whether they were aware of the ability to invoice and settle trade in RMB (results presented in Table 2). One of the most significant findings was 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 private Chinese firms whereas it was considerably higher for SOEs. However, this is likely driven by firm size as the majority of the small firms in the Chinese sample were private. In contrast, 93 per cent of large private firms and 88 per cent of large SOEs were aware of the ability to invoice in RMB. Although the China intra-group sample was above the mean, 20 per cent of Chinese corporates with operations in Australia were also unaware of the ability to invoice in RMB. However, it is encouraging that 44 per cent of the Chinese firms unaware of RMB invoicing indicated that they would consider using RMB in future.

These results are partly affected 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
<b>Overall awareness</b>		98%	69%
<b>Awareness by importer/exporter</b>	Importer	96%	61%
	Exporter	100%	84%
	Both	100%	75%
<b>Awareness by intra-group/external</b>	Intra-group	100%	64%
	External	96%	66%
	Both	100%	80%
<b>Awareness by industry</b>	Industrial	89%	73%
	Mining	100%	79%
	Retail	100%	90%
	Food and beverages	100%	55%
<b>Awareness by SOE</b>	SOE	N/A	80%
	Private	N/A	64%
<b>Awareness by size/turnover</b>	Very small	86%	53%
	Small	100%	50%
	Medium	100%	78%
	Large	98%	91%

## Use

Consistent with the awareness levels, the use of RMB trade invoicing by small and medium firms was negligible in comparison with the use by large firms (see Table 3). This was also the case for private firms with very low usage levels, whereas 40 per cent of SOEs reported that they had used RMB. In contrast to the awareness results, the use of RMB by large firms is dominated by SOEs with only 6 per cent 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.<sup>9</sup>

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.

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**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	47%	18%
	Mining	56%	43%
	Retail	20%	0%
	Food and beverages	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 related to price and access, 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.

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**TABLE 4: Benefits**

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

## Disadvantages

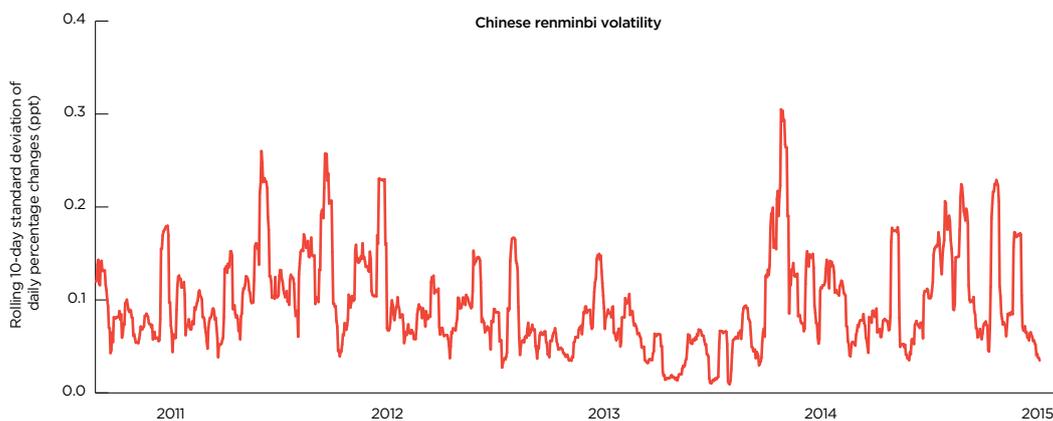
Respondents also identified the disadvantages of RMB settlement and these are separated into respondents who have never settled in RMB and those who have (Table 5). The Australian firms who had never settled in RMB noted the costs of deviating from \$US contracts and the concern that trading partners would be unwilling to settle. This is particularly relevant for the mining sector in Australia where, 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 the main difficulty with RMB settlement was concerns over losing potential gains from currency movements. 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 evident<sup>10</sup> in Figure 2 and the widening of the RMB trading band to 2 per cent could prompt a reassessment 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 fluctuations would drive our organisation to change our trade settlement behaviour and favour RMB'.

**FIGURE 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 disadvantages 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 respondents 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 of 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 per cent of Australian corporates are waiting for Chinese firms to request RMB invoicing and 76 per cent of Chinese corporates are waiting for Australians to accept it. The results reflect something 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'.

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Although the Chinese corporates were waiting for the Australian trading partner to request or accept RMB only 28 per cent expected their trading partner to encourage them to do so. In contrast, 49 per cent of Australian firms expected the push to come from China. Indeed, 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 comments like 'we will use RMB if our government requires us to do so.'

There is also a sense of the need to 'test 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 per cent of Chinese corporates aware of the ability to invoice in RMB indicated that changes to Chinese regulations 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 since the time of the RBA survey which indicated that 56 per cent 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 small- and medium-sized enterprises (SMEs) and private firms as well as some industry specific guidance on the benefits of RMB settlement. The cost of hedging, especially in the wake of increased RMB volatility (Figure 2 above), is an important area where greater awareness is required. If the transfer of hedging costs from China to Australia results in a win for corporates in both countries 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 per cent 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 being relaxed, and financial reforms are being smoothly implemented, and 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 preparing 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 increased RMB trade invoicing and settlement in the future will require greater awareness in China, especially in relation to the costs of hedging in a high-volatility market.

## Acknowledgements

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## Notes

1. See Eichengreen et al. (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).
4. Ito and Chinn (2013) provide a good background to the theory of trade invoicing.
5. Standard Chartered (2014) suggested that companies can shave 2 to 3 per cent off costs by invoicing in RMB whereas Swift (2012) noted that the PBOC have been quoted as saying that importers could save 2 to 3 per cent by paying in RMB. Deutsche Bank (2012) reported that for companies paying exports in RMB the savings averaged 4.8 per cent. The HSBC (2013) RMB Cross Border Trade Settlement Survey indicated that 53 per cent of Chinese businesses would offer discounts of up to 5 per cent for transactions settled in RMB.
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 et al. (2013).
8. Size by number of employees is measured as less than 3000 employees for Chinese SMEs and less than 200 employees for Australian SMEs. Size by (annual) turnover is measured as less than ¥30m, ¥300m, ¥500m and over for China. It is measured as less than \$5m, \$10m, \$100m and over \$100m for Australia.
9. Many Australian mining firms noted that their invoicing and settlement in RMB only represented 1 per cent of their total trade with China.
10. RMB is low compared to other currencies but is relatively high compared to historical levels.

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