Guy Debelle: Benchmarks

Speech by Mr Guy Debelle, Assistant Governor (Financial Markets) of the Reserve Bank of Australia, at the Bloomberg Summit, Sydney, 18 November 2015.

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Today I am going to talk about benchmark rates, in both fixed income and foreign exchange. This is an issue that might seem arcane to some, but like Jonathan Richman, “I keep my place in the arcane”. Benchmarks are very much at the heart of the plumbing of the financial system. Indeed, every investor with any global or fixed income exposure is almost certainly investing in a product that uses a benchmark rate, even if they don’t know it. After having been taken for granted for many years, benchmark rates have well and truly come into the public domain in recent years with headline-generating legal cases and multi-billion dollar fines. They have also attracted considerable regulatory scrutiny and reform to redress some of their deficiencies which made them vulnerable to abuse. Participating in this global reform of benchmark rates has been my night job for the past couple of years and it is these reforms that I wish to talk about today. As participants in financial markets, it is important that you have some understanding about what these reforms are endeavouring to achieve.

I will talk first about benchmark reform in foreign exchange and also mention briefly the work on developing a single code of conduct for the foreign exchange market. Then I will talk about interest rate benchmarks, focussing on domestic reforms around the principal interest rate benchmark in Australia, the bank bill swap rate, consideration of a “risk-free” interest rate for the domestic market and briefly some (small) changes to the calculation of the cash rate, the Reserve Bank’s operational target for monetary policy.

FX Benchmarks

I will start with foreign exchange (FX) benchmarks. Why should you care about these benchmarks? For starters you might have a contract which explicitly references a particular FX benchmark. But probably more likely, if you invest in any sort of global portfolio, be it in fixed income or equity, it is highly likely that the portfolio uses an FX benchmark to weight the components across different markets, generally the London 4pm set of foreign exchange benchmarks calculated by the WM Company. Moreover, as the portfolio is rebalanced periodically (often at month end) to reflect movements in prices over the period, it is very likely that the foreign exchange transactions to rebalance the FX component of the portfolio occur during the London 4pm fixing window to minimise the tracking error against the calculated benchmark. So while you might think you are investing in equities or fixed income in your global portfolio, you are also passively investing in foreign exchange.

From early 2013, concerns were increasingly raised about the integrity of FX benchmarks, particularly around the potential for market misconduct in the trading around the time of benchmark fixings. Accordingly, the Financial Stability Board (FSB) formed a group chaired by Paul Fisher of the Bank of England and me to firstly analyse the structure of the FX market and the incentives that might promote inappropriate trading activity around a fix, and then come up with some potential remedies to address the problems we found.

After talking to participants from all sides of the FX market around the world, in September 2014, we proposed 15 recommendations to reform the FX benchmark process, which were endorsed by the FSB.[1] These recommendations were in four main areas: benchmark methodology; execution of benchmark transactions; market conduct; and guidance on reference rates produced by central banks.

Earlier this year, at the request of the chair of the FSB, Mark Carney, I chaired a group that summarised the progress in implementing the 15 recommendations one year on, drawing on information gathered by the foreign exchange committees (FXCs) and central banks in the major FX centres. We put out a progress report on FX benchmarks just over a month ago.[2]

I will provide a quick summary of what has happened in this space over the past year and briefly highlight some areas where there is still more to be done.

In terms of benchmark methodology, we made a number of recommendations concerning how WM calculate the London 4pm fix. In particular, we recommended widening the fixing window, and as a result, from February 15, WM widened their calculation window from one minute to five minutes.

This widening of the window appears to be helping to achieve the intended outcomes and the progress report contains some data analysis to support this. It is early days yet, with only a few month-ends (where flows through the fixing window are generally the largest), but so far, it would appear, so good. If you are interested I would recommend reading Section 3 of the report which compares the exchange rate dynamics before and after the change in the window for a number of currency pairs including the Aussie ($US/$A).

The wider window has also helped to highlight the risk transfer involved between the buy-side firm initiating the transaction and the sell-side firm executing it for them. This in turn was very helpful in the communication of another of our recommendations, which garnered quite a lot of attention, namely that fixing transactions should be charged for. Previously, transactions were often executed for free, at least notionally. The “free” cost of the transaction probably increased the incentive for manipulation as trading desks sought to generate greater profitability to compensate for taking on this risk.

The widening of the window in February served as a focal point for sell-side firms to start charging for these services. Most sell-side respondents to the FXCs’ surveys report that they are now charging for fixing transactions, particularly those linked to the London 4pm fixes and especially the most liquid currency pairs. That said, some respondents, who tended to be smaller banks less active in the fix, reported they were still reviewing their pricing structure for benchmark orders.

Moreover, while there had been good progress in terms of the London fix, there was much less progress for other fixes. However, the scope for benchmark manipulation is there for all fixes, not just the London 4pm fixes, and hence it is important to reiterate that the recommendations of our report are intended to apply to all FX benchmarks, not just the London 4pm.

So how are fixes being charged for? A mix of pricing strategies is being used. Some are applying a bid-offer spread, some a fixed fee, where the fee is based on an assessment of the risk transfer involved. Others are pursuing a strategy which could be called “rent my algo”, where a firm provides access for a fee to an algorithmic trading tool to directly execute their fixing transaction in the fixing window.

This in turn, leads me to another of the recommendations of the report, namely that banks should establish separate processes for handling and executing their fixing orders from other

1 These recommendations were contained in a report published by the FSB that is available at <http://www.financialstabilityboard.org/wp-content/uploads/r_140930.pdf>.

2 The progress report is available at <http://www.financialstabilityboard.org/wp-content/uploads/FX-Benchmarks-progress-report.pdf>.

orders. This recommendation was designed to address potential conflicts of interest arising from managing customer flow. A sizeable number of banks have implemented this recommendation by shifting the execution of fixing orders from the spot voice FX trading desk to electronic trading desks that execute them with algorithms.

As a result, the share of fixing orders executed by algorithm has increased substantially, as we document in the progress report. There is also considerably enhanced internal scrutiny from senior management around fixing transactions. Some firms have physically separated their fixing desk from other desks. This segregation of trading functions has involved some cost. Other participants regarded the cost of implementing this recommendation as being too high, given the size of their business, and have not implemented it to date. Others have decided to cease offering this service directly, in some cases offering customers a portal to other fixing services instead.

Again, I would like to emphasise that the intention of our recommendations was that it was to apply to all participants, with appropriate consideration to the size and structure of the market.

In the case of smaller, less actively traded currencies, separation of business is clearly more complicated than for large actively traded currencies, but in these cases participants should still be able to demonstrate to their customers that appropriate processes are in place, in keeping with the fundamental motivation of the recommendation to reduce the scope for benchmark manipulation.

In terms of market conduct, we made a number of recommendations around appropriate sharing of information, including around trading positions (beyond that necessary for a transaction) and particularly customer information. These were picked up in a statement of *Shared Global Principles* that was published following the Global FXC meeting in Tokyo earlier this year.[3] Many market participants have reflected these principles in their internal policies and codes of conduct, as well as revised policies around benchmark execution consistent with our recommendations.

FX code of conduct

More broadly in terms of improving market conduct, in May this year, the BIS Governors commissioned a working group of the Markets Committee of the BIS to facilitate the establishment of a single global code of conduct for the FX market and to come up with mechanisms to promote greater adherence to the code.[4] I am chairing this work, with Simon Potter of the New York Fed leading the work on developing the code and Chris Salmon of the Bank of England leading the adherence work.[5] Our group comprises representatives of the central banks of all the major FX centres. It is very much a global effort. We are being supported in this work by a group of market participants, chaired by David Puth of CLS, that contains people from all around the world on both the buy-side, including corporates, and the sell-side, along with trading platforms and non-bank participants. The intention is to have this work of developing a single code to replace the various regional industry codes completed by May 2017. However, we intend to put out some parts of the global code, including some material on order handling and execution, by May 2016. I will talk more about this next week at the FX Week conference in London.

So why have I taken the time to run you through all of this?

3 These principles are available at: http://www.rba.gov.au/afxc/about-us/pdf/global-preamble.pdf.

4 http://www.bis.org/press/p150511.htm.

5 http://www.bis.org/about/factmktc/fxwg.htm.

As market participants, regardless of which side of the market you are on, it is important that you are aware of the changes that have occurred, and are still underway, in the foreign exchange market. If you are on the sell-side, I would trust that you are well aware of these changes, and hopefully, I have provided you with some of the background and motivation for them. There is a fuller articulation of this in the FSB report itself.

As I said earlier, particularly if you are in the asset management business, you may not have paid so much attention to the FX aspect of your business. But it is important that you also understand the context for the changes that are occurring. Some practices that you were accustomed to in the past, or maybe were unaware of, may no longer be available, and you cannot expect your counterparty to provide them.

The motivation for these changes is to reduce the incentive and opportunity for improper trading behaviour by market participants around benchmark fixes. The implementation of the recommendations in our report, together with the enhanced scrutiny externally and within organisations on fixing transactions appears to have moved the market in a favourable direction.

As we develop the single code of conduct for the FX market, hopefully the market will move further in that direction and allow participants to have much greater confidence that the market is functioning appropriately.

Interest rate benchmarks

Let me now turn to interest rate benchmarks. In light of the issues around LIBOR and other interest rate benchmarks, there has been a global reform effort also under the aegis of the FSB to improve the functioning of interest rate benchmarks.[6]

Interest rate benchmarks are integral to the plumbing of the financial system. Many financial contracts reference interest rate benchmarks. The interest rate on a corporate loan is often a spread to an interest rate benchmark. Derivative contracts generally are based on them, as are most asset-backed securities.

I will focus on the local market, where the primary interest rate benchmark is the bank bill swap rate (BBSW).

BBSW

As you may be aware, a few weeks ago, the Council of Financial Regulators issued a consultation paper on possible reforms to BBSW.[7] I will run through the motivation for doing so as well as the possible options we canvassed in the consultation paper.

Given its wide usage, BBSW has been identified by ASIC as a financial benchmark of systemic importance in our market.[8] Hence it is important there is ongoing confidence in it.

As you may know, BBSW was calculated for a number of years by, each day, asking a panel of banks to submit their assessment of where the market was trading in Prime Bank paper at a particular time of the day. While it was a submission-based process, it was different from

[6] See the FSB's report on Reforming Major Interest Rate Benchmarks released in July 2014, available at: http://www.financialstabilityboard.org/wp-content/uploads/r_140722.pdf; and the July 2015 update on progress, available at: http://www.financialstabilityboard.org/wp-content/uploads/OSSG-interest-rate-benchmarks-progress-report-July-2015.pdf.

[7] The consultation paper is available at: http://www.cfr.gov.au/publications/consultations/evolution-of-the-bbsw-methodology/.

[8] See ASIC's report on Financial Benchmarks, Report 440, released in July 2015, available at: http://download.asic.gov.au/media/3285136/rep440-published-8-july-2015.pdf.

LIBOR in that it was the assessment of the borrowing cost of a notional Prime Bank, informed by observable transactions, rather than an assessment of a submitting bank's own borrowing costs.

In response to the prospect of a large number of the banks on the submission panel no longer being willing to provide submissions, the calculation of BBSW was reformed in 2013 in line with the International Organization of Securities Commissions' (IOSCO) *Principles for Financial Benchmarks*, which were issued in July 2013.[9]

Since 2013, the Australian Financial Markets Association (AFMA) calculates BBSW benchmark rates as the midpoint of the nationally observed best bid and best offer (NBBO) for Prime Bank Eligible Securities, which are bank accepted bills and negotiable certificates of deposit (NCDs). Currently, the prime banks are the four major Australian banks. The rate set process uses live and executable bid and offer prices sourced from interbank trading venues approved by AFMA, which are currently ICAP, Tullett Prebon and Yieldbroker. The bids and offers are sourced from three times around 10am each day.

While the outstanding stock of bills and NCDs issued by the Prime Banks has increased since 2013 to around $140 billion, trading activity during the daily BBSW rate set has declined over recent years. The consultation paper illustrates how low the turnover currently is. There are quite a number of days where there is no turnover at all at the rate set. The low turnover in the interbank market raises the risk that market participants may at some point be less willing to use BBSW.

This is the motivation for the CFR's consultation to ensure that BBSW remains a trusted, reliable and robust financial benchmark.

Some preliminary data collected from the four major Australian banks indicate that there is substantially more activity in the NCD market than is being measured at the rate set, with the activity mainly occurring outside the interbank market. At least $100 million in NCDs were bought or sold on almost all business days, with activity almost entirely at the 1-, 3- and 6-month tenors. However, the non-bank participants that buy and sell NCDs tend to transact bilaterally with the issuing bank, with the price struck at the (yet to be determined) BBSW ahead of the actual rate set, rather than at a directly negotiated rate. If these participants could be encouraged to buy and sell NCDs at outright yields, then these transactions may have the potential to underpin the BBSW benchmark.

Hence the consultation paper proposes one option for reform which would be to continue with the current NBBO calculation methodology, but to underpin the executable prices with a broader set of NCD market transactions contracted up to the time of the rate set. By more firmly anchoring the BBSW benchmark to observable transactions entered into at arm's length between buyers and sellers in the market, this may ensure that the benchmark remains a credible indicator of rates in the market.

For this option to be feasible, it would be necessary for the banks to directly negotiate the interest rates on their NCDs with third parties, rather than linking the rate to BBSW. This would require a change to the existing market practice. (In this regard this option has some similarities with the FX benchmark reforms where prior to the reforms, participants also agreed to transact at a yet to be determined price and at the midpoint of the fix.)

Another option for reform, akin to the proposed methodology for LIBOR, would be for the banks to submit to the benchmark administrator their assessment of their aggregate cost of wholesale funding, based on their transactions in a particular window. That is, the banks would do the aggregation and the administrator would only need to average the (currently) four submissions. An alternative option would be for the banks to submit all their

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[9] The IOSCO Principles for Financial Benchmarks are available at: https://www.iosco.org/library/pubdocs/pdf/IOSCOPD415.pdf.

transactional data to the benchmark administrator who would then itself do the aggregation. Both of these options would need to provide for circumstances in which the Prime Banks had not executed any transactions in the relevant window.

The final option would be to accept the current system as it is, notwithstanding the very low turnover at the rate set.

The consultation is open until 3 December.[10] Given the importance of BBSW for the market, if you have any interest in the issue, I would ask that you consider making a submission.

Risk-free rates

Next I would like to briefly raise some issues around whether the use of BBSW needs to be quite as widespread as it is. In a number of instances, BBSW has become the *default* reference rate without much thought being given as to whether it is the most *appropriate* reference rate. BBSW is a credit-based reference rate. It is based on the borrowing costs of the major banks, with the credit risk that entails embodied in the rate.

For a number of purposes, such a credit-based rate is completely appropriate. However, for other purposes, a rate that is closer to risk-free may be more appropriate. For instance, in recent years, market participants have moved to use overnight-indexed swap (OIS) rates more often when discounting the cash flows in their swaps. The FSB, through its official sector steering group (OSSG) on benchmark reform, is encouraging market participants to contemplate switching from credit-based benchmark rates like BBSW or LIBOR to risk-free rates, where appropriate. We are working with AFMA in the local market to encourage market participants to consider this.

One example where a change in reference rate could be contemplated is for residential mortgage-backed securities (RMBS). RMBS coupon payments are typically priced at a spread to 1-month BBSW. Since the introduction of the Liquidity Coverage Ratio, banks have little incentive to issue 1-month paper, since they would need to hold high-quality liquid assets against the funds raised. If they do issue, then the pricing will be different from the past. A rate based on the cash rate may be a more appropriate benchmark. Such a rate could be backward looking, like the actual cash rate itself, or forward looking, like OIS rates. Alternatively, a benchmark rate of 90 day BBSW which more robustly reflects bank funding costs, may be worth thinking about.

That is one example worthy of consideration. There are a number of others. I know this is not necessarily an issue you may have thought that much about until now. At the very least, I would encourage you to at least ask the question whether the product you are issuing or holding is using the most appropriate reference rate.

Cash rate

Finally, I will briefly mention the cash rate. As the RBA's operational target for monetary policy and the reference rate for OIS and other financial contracts, the cash rate is another systemic benchmark. Consequently, we are making sure that our methodology for the cash rate is also in line with the IOSCO benchmark principles. We are in the process of ensuring that our data collection is capturing all cash market trades appropriately and that we can match data from both sides of the transactions. This will entail a few changes but we do not expect these to have any material impact on the calculated outcome for the cash rate.

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[10] Responses can be sent to BBSWConsultation@rba.gov.au.

Conclusion

Let me conclude. You've probably heard more today about benchmarks than you ever really wanted to hear. But benchmarks are a very critical part of the plumbing of the financial system. It is important that market participants have a reasonable awareness of how they are calculated rather than simply taking them for granted. But even more importantly, market participants need to have confidence in their robustness and integrity. To help ensure that is the case, a number of reforms to benchmarks have been undertaken. But the process is still ongoing to make sure this part of the market gets to a better place than where it has been in the past.