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## Topical article

The Bank's Market Intelligence function



# The Bank's Market Intelligence function

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- The Bank of England's Market Intelligence function gathers information from financial market participants, providing insights that feed into the Bank's operations and policy decisions of the Monetary Policy Committee, the Financial Policy Committee and the Prudential Regulation Committee.
- Market intelligence provides value to the Bank's analysis by going beyond the quantitative data
  and getting under the surface to the qualitative interpretations and nuances that might not be
  obvious from publicly available data alone.
- Two case studies demonstrate how market intelligence is used to inform the Bank's policymaking process.

#### Overview

The Bank of England's position at the heart of the financial system and its distinct remit and responsibilities provide the unique opportunity and need to gather information from financial market participants (known as market intelligence, or MI). The value of market intelligence comes from its use in supplementing, informing and enhancing the analysis carried out across the Bank. Market intelligence provides insights into how financial market participants think about markets, products and prices and why institutions and markets respond as they do to developments. As such, MI ensures the Bank's policy decisions are made with a sound understanding of financial markets, shedding light on aspects of the financial system where there may be little public data available, and getting beneath the surface of financial market activities.

The financial crisis reinforced the importance of MI gathering in informing the Bank's work. For example, MI served to inform the design, implementation and evaluation of unconventional monetary policy tools, such as the purchase of assets for quantitative easing, which were important in stabilising the economy and financial system following the 2008 financial crisis. Due to the way MI is gathered, it can also often provide the most immediate reactions to, and interpretations of, how policy announcements or events are impacting markets and the financial system.

Two case studies are described in this article to provide further detail on how MI feeds into the Bank's policymaking process. The first outlines how MI was used to inform the operational design of the Corporate Bond Secondary Market Scheme in 2009. The second focuses on the Bank's more recent work on market liquidity and the role MI played in understanding the issue and the Bank's policy response.

In gathering MI, the Bank and its staff may receive privileged information. This can pose risks if not handled appropriately. As a result, the Bank has robust processes to ensure staff are acting according to the highest professional standards. In addition, the Market Intelligence function uses a publicly available Charter<sup>(1)</sup> to describe its terms of engagement with market contacts. This includes information about why we collect MI and how we record and use the information collected.

The financial system, the Bank's remit and the economic, technological, social and political backdrop have changed dramatically in recent decades. So too has the coverage, structure and formality of the Market Intelligence function. The Market Intelligence function will continue to evolve, as appropriate, in response to external developments, as will the policies and procedures that support the work.

The Bank of England's position at the heart of the financial system and its distinct remit and responsibilities provide the unique opportunity and need to gather information from financial market participants (known as market intelligence, or MI). This has long been an important part of the Bank's activity, such that the collection, analysis and dissemination of market intelligence is now intimately woven into, and informed by, the whole Bank.

The Bank's operations within the financial markets, such as the implementation of monetary policy or managing the United Kingdom's foreign exchange reserves on behalf of HM Government means it has access to an extensive range of market participants, for example, banks, brokers and broker-dealers. Its location in one of the world's most important financial centres and influence over the financial system means the Bank also has the opportunity to engage on a frequent basis with other key market participants. This gives the Bank (and specifically its Market Intelligence function) access to insights that may not otherwise be shared publicly.

Market intelligence rarely provides the full story by itself, but its value comes when it is used to supplement, inform and enhance the analysis carried out across different areas of the Bank. Ultimately, the purpose of MI is to provide policymakers with insight to ensure that the Bank's policy decisions are made and implemented with an appropriate understanding of the financial market context in which the Bank operates.<sup>(1)</sup>

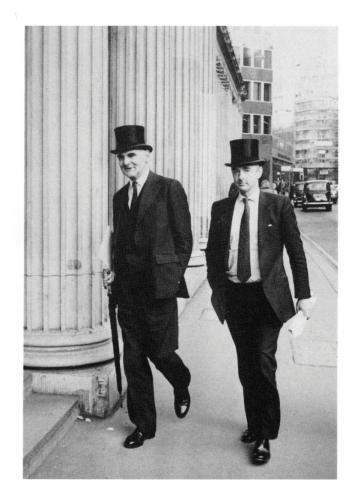
Market intelligence provides insights into how financial market participants think about markets, products and prices and why institutions and markets respond as they do to developments. Market intelligence helps the Bank to delve beneath the surface of what is happening and understand: transmission mechanisms (eg the efficacy of monetary policy measures); trends (eg developments in corporate and bank debt issuance); technical market drivers (such as understanding the 'flash event' in sterling in October 2016); and emerging risks (eg changes to overseas investor appetite for UK assets in the wake of the referendum on the United Kingdom's membership of the European Union). Market intelligence can support analysis by casting light on aspects of the system where little or no public data are available. It also helps the Bank to better understand the data that are available, both by getting others' interpretations but also by identifying any nuances that might not be obvious from the numbers alone. Without MI, the Bank's ability to understand not only what is happening in the financial system, but why, would be impaired.

Market intelligence gathering is undertaken in various forms by central banks across the world. The Bank shares experiences and best practice for gathering MI with other central banks, including, via the Bank for International Settlements Markets Committee.<sup>(2)</sup>

#### History and evolution of Market Intelligence

Market intelligence was first formalised in the Bank of England in 1786 by the creation of the position of the 'Senior Broker to the Commissioners for the Reduction of the National Debt', and continued in this form until 1989.

Conjuring up a picture of the City in years gone by, this top-hat wearing individual (see image below)<sup>(3)</sup> was responsible for announcing (in person) changes in the Bank's minimum lending rate. At the same time, he gathered opinion on the state of the gilt market and reported his intelligence three times a day about market activity, volumes of buying and selling, and relative demand for gilt maturities and coupons. More generally, through his interaction with the market, he was relied upon to report on the mood of investors, appetite for stock, institutional cash positions and expectations for policy or data outturns.



<sup>(1)</sup> Market intelligence is one of a number of ways in which policymakers achieve this. The Bank talks to a diverse range of contacts via its Agents, Stakeholder Relations Group, regional visits and events such as the Open Forum in 2015, to name a few.

<sup>(2)</sup> For more information, see recent paper on Market Intelligence Gathering at Central Banks; www.bis.org/publ/mktc08.pdf.

<sup>(3)</sup> Sir Nigel Althaus (left), Senior Broker to the Commissioners for the Reduction of the National Debt, 1982–89, with Roger Daniell (right), his deputy.

The financial system, the Bank's remit and the economic, technological, social and political backdrop have changed markedly since the late 1980s. So too has the coverage, structure and formality of the Market Intelligence function. While the essence is the same, with face-to-face interaction still occurring, more rapid and instantaneous exchange via Bloomberg terminals or telephone now provides more timely information in an increasingly fast-paced environment.

The financial crisis reinforced the importance of market intelligence gathering in informing the Bank's work and catalysed further changes to it. During the height of the crisis, MI was a crucial source of information in the absence of traditional metrics in understanding bank funding conditions (eg the drying up and bifurcation in bank funding markets was not visible from mainstream and public data sources) and the ripples through the financial system (eg investor attitudes towards securities issued by banks, corporates and governments; the complex chains of securitisations and the vulnerable links in the system). Market intelligence served to inform the design, implementation and evaluation of unconventional monetary policy tools, such as the purchase of assets for quantitative easing, which were important in stabilising the economy and financial system.<sup>(1)</sup>

Market intelligence can often provide the most immediate reactions to, and interpretations of, how policy announcements or events are impacting markets and the financial system. For example, following the outcome of the referendum on the United Kingdom's membership of the European Union in June 2016, the Bank's Market Intelligence function was able to brief the Governors and others across the Bank on the immediate market reaction to the result to ensure that appropriate policy and communication decisions could be taken if required in a timely fashion.

Developments in technology coupled with responses to new regulatory regimes have driven innovation in the financial landscape in recent years, for example, the increasing usage of electronic trading platforms and the development in investment products. For horizon-scanning purposes, including monitoring emerging risks, the Bank's Market Intelligence function needs to ensure that policymakers are apprised of these developments. This has resulted in a broadening of the Bank's range of contacts in order to further develop a deep understanding of how financial markets are evolving (see more below). The Market Intelligence function will continue to adapt, as appropriate, in response to external developments, and so too will the policies and procedures that support the work.

#### Contribution to policymaking

Market intelligence gathered by the Market Intelligence function feeds into internal analysis on policy-relevant issues, and contributes to decision-making, policy implementation and communications by the Bank's three main committees: the Monetary Policy Committee (MPC), the Financial Policy Committee (FPC), and the Prudential Regulation Committee. This contribution can take place at any number of stages of policymaking, with MI able to:

- (a) provide qualitative perspectives on policy decision-making;
- (b) support the design and evaluation of the Bank's operations;
- (c) provide insights where little or no public data are available; and
- (d) scan the horizon for risks to monetary and financial stability.

Taking the monetary policy process as an illustration, analysts who brief the MPC analyse and interpret financial market data in order to inform policy decision-making. Market intelligence complements those data and model-based analyses by helping to tell the story behind the numbers and informing the narrative, especially when data are scant or produced with a lag. In advance of policy announcements, MI can help the MPC to consider how best to communicate its messages. For example, the decision as to how the MPC communicated its opinion that the effective lower bound for Bank Rate had declined (in February 2015) was in part informed by the judgement of the Bank's money market desk, who were able to highlight to the MPC what the existing assumptions were in the market.

Following announcements of monetary policy decisions, feedback and reactions are gathered from market participants and contribute to an assessment of how communications by the MPC have been interpreted. The Bank's relationships with market contacts mean that it can gather, interpret and report back on this feedback to the MPC on the day of an announcement. The assessment of the insights gathered can also provide new hypotheses and evolving narratives which can inform future analysis, and contribute to the design of the policy framework and operations. This in turn allows analysts and policymakers to update their views on the data and initiates again the process to inform policy decision-making. The role of MI in the monetary policy process is demonstrated in Figure 1 and explored later on in a case study of the design and implementation of the Corporate Bond Secondary Market Scheme in 2009 (CBSMS).

Taking another example from a prudential policy perspective, conversations with market participants can help with understanding the practical impact of regulation on financial market functioning. Market intelligence can also highlight new activities or risks that may not currently be appropriately captured by financial regulation. Where risk mitigation

Figure 1 Market intelligence and the monetary policy process



warrants Bank intervention, MI can be utilised in policy formation and implementation.

The Bank's understanding of, and sometimes participation in, relevant markets help it to identify where input from market participants may need to be filtered for their particular commercial interests. This ensures that the Bank's work is focused only on areas where there are real issues for policy to respond to. For example, in April 2014 the Bank set out proposals to revive securitisation in the EU to promote financial stability.(1) Concerns around impairment in securitisation markets, barriers to activity and how these could be addressed to support the revival of more resilient securitisation activity were highlighted in MI meetings. Knowledge of these markets and of market participant drivers, established from MI gathered over a number of years, helped the Bank to filter out potentially self-serving motivations and ideas for reviving this market. Instead MI shifted the focus to the characteristics of robust methods of securitisation and recommended initiatives to promote a better functioning market. Another example of the prudential and financial policy cycle in action (Figure 2) is provided in the market liquidity case study.

#### The Bank's broader external interactions

The Bank's external interactions are extensive and not limited to the Market Intelligence gathering function. Different parts of the Bank engage with a range of individuals, institutions and trade bodies in order to inform policy and operations. This ranges from academics, to industry experts and the public through its monetary policy area and public communications/ stakeholder engagement teams, corporates and small and medium-sized enterprises via the Agency network<sup>(2)</sup> and firms regulated by the Prudential Regulation Authority (PRA).

Figure 2 Market intelligence and the prudential policy process



Each of these interactions will have a different approach and remit, even if there is sometimes a crossover of the firms and individuals to whom the Bank speaks. For example, PRA supervisors will speak to contacts at many of the firms also engaged with for MI gathering purposes.

Supervisory meetings by the PRA are focused on the individual firms — for example, their business models, risk profiles and responses to regulation. In contrast, the focus of the Market Intelligence function is the market participants' perspective on the market they operate in and themes that cut across the financial system as a whole.

#### Who do we collect MI from?

In recognition of the fact that MI is at its most valuable when gathered from a variety of sources, the Bank maintains a broad range of contacts, continuously updated, including market participants operating in major overseas financial centres. London's position as an international financial centre both necessitates and facilitates this broad coverage. Identifying and maintaining a relevant and diverse contact base, which reflects the structure and composition of key participants in markets and products, is crucial to ensuring the intelligence is representative. As well as financial market intermediaries, the Bank's Market Intelligence contacts include so-called 'buy-side' participants, particularly fund managers and

<sup>(1)</sup> Although securitisation can pose risks to financial stability, as witnessed most acutely by its role in the financial crisis, it can also support financial stability and benefit the economy if it is structured and regulated appropriately. The intention of the proposals was to promote simple and transparent securitisation. For more information see the full Discussion Paper available at www.bankofengland.co.uk/publications/Documents/ news/2014/paper300514.pdf.

<sup>(2)</sup> For more information on the Bank's Agents, see England, D, Hebden, A, Henderson, T and Pattie, T (2015), 'The Agencies and 'One Bank', Bank of England Quarterly Bulletin, Vol. 55, No. 1, pages 47–55; www.bankofengland.co.uk/publications/Documents/quarterlybulletin/2015/q104.pdf.

insurance companies; corporates; and financial infrastructure providers and principal-trading firms.

Interaction with Market Intelligence contacts takes place at a range of levels within institutions to provide different perspectives on financial market developments. Contact at the senior levels (eg Global Heads of Markets) can provide insights into business models, structural change and strategic direction. Contact at more junior levels brings the Bank closer to innovation, the 'mood' of the market and what is driving popular trading activity. Outside of individual institutions, trade association contacts provide a chance to engage on a range of topical issues and to highlight potential areas of risk, as well as providing a link to their members.

## How does the Market Intelligence function work?

The type of MI activity is directed by the current topics of interest to the Bank. The priorities for the Market Intelligence function are set quarterly by a cross-Bank steering group of Executive Directors in order to ensure that the intelligence gathered is relevant to the current work streams and priorities across the Bank. Between priority-setting meetings it is also important for Market Intelligence resources to be nimble and able to react to unfolding events as necessary.

Market intelligence gathering activity is split by teams who cover the different markets and sectors that the Bank is interested in. Teams can be established on a temporary basis to cover specific pieces of work, for example due to an event (eg the referendum on the United Kingdom's membership of the European Union); a particular issue that the Bank wants to explore (eg the impact of negative interest rates on derivatives markets) or to input into cross-Bank work (eg market liquidity — see the case studies below).

The vast majority of MI is gathered through scheduled, bilateral meetings and conversations with contacts in relevant parts of financial market institutions. Regular liaison takes place daily to keep abreast of what is happening in financial markets in real time. Other conversations take place as part of discussions focused on a particular topic or theme, for example, gauging expectations for and reactions to monetary policy decisions or to understand a nascent market. Market intelligence gathering is also undertaken via multilateral forums where the Bank engages with more than one institution in the same meeting, for example, as part of the discussions of the London Foreign Exchange Joint Standing Committee(1) and the Money Markets Liaison Committee (MMLC).(2)

#### Managing the risks in gathering MI

In gathering MI, the Bank and its staff may receive privileged information. This can pose risks if this information is not handled appropriately. As a result, the Bank has robust processes, which were strengthened in 2015 following an internal review of its Market Intelligence framework.<sup>(3)</sup> The objective is to ensure staff are acting according to the highest professional standards. All Bank staff are required to comply with a code of conduct that requires ethical and professional behaviour.<sup>(4)</sup> Those staff within the Market Intelligence function are additionally required to comply with a set of policies and procedures which cover risk mitigation and best practice principles when undertaking MI gathering.

Furthermore, the Market Intelligence function uses a publicly available Charter to describe its terms of engagement with contacts. This includes information about why we collect MI and how we record and use the information collected.

Risks may also emerge if MI gatherers do not sufficiently understand or appreciate the implications of the information they receive, particularly if that information may allude to misconduct in financial markets. Those staff involved in the Market Intelligence function are supported through a training programme to ensure they have appropriate technical knowledge of financial markets and key legal frameworks in which participants operate.

Another risk from gathering MI is that the information gathered may be misleading or unbalanced. One safeguard against this is the broad base of contacts utilised by Bank staff gathering MI. This supports the balance of intelligence that is then synthesised to create a clear picture for policymakers.

#### What happens to the MI gathered?

As mentioned above, market intelligence feeds into the Bank's policymaking process at several points. The following paragraphs discuss case studies of instances where MI has been effectively used to identify, monitor and mitigate risks to the financial system.

#### Market Intelligence case studies Corporate Bond Secondary Market Scheme 2009

Market intelligence is regularly employed by the Bank to inform operational policy design. For example, MI provided an integral part of the planning and implementation of the Corporate Bond Secondary Market Scheme (CBSMS). The

- (1) See www.bankofengland.co.uk/markets/Pages/forex/fxjsc/default.aspx.
- (2) As outlined in the minutes of the MMLC meeting in December 2016, members expressed unanimous support for the reform of the MMLC and Securities Lending and Repo Committee to create a single Money Markets Committee. For more information on the MMLC see www.bankofengland.co.uk/markets/Pages/money/smmlg.aspx.
- (3) See www.bankofengland.co.uk/markets/Documents/marketintelligence/review.pdf.
- (4) See www.bankofengland.co.uk/about/Documents/humanresources/ourcode.pdf.

Scheme was launched by the Bank in March 2009 in response to the financial crisis. The Scheme's purpose was to improve corporate access to capital market financing by reducing illiquid conditions in secondary corporate bond markets. Market intelligence played an important role in understanding the source of this market dysfunction and supporting the design of a solution to address it.

Along with quantitative analysis, MI identified the illiquid conditions in corporate bond markets and the potential for central bank intervention. In the second half of 2008, corporate bond spreads of UK companies rose sharply. While this rise could partly be attributed to the increased risk of corporate default in challenging financial conditions, a significant proportion of it remained unexplained.(1) Meetings with market participants indicated that some of this residual increase in bond spreads was due to the presence of an illiquidity premium. Contacts explained that market-making activities of banks had greatly reduced<sup>(2)</sup> leading to a lack of transparency in pricing. Market liquidity could be enhanced if market-making was re-established and bond prices became more available to investors and issuers. The resultant reduction in the illiquidity premium would decrease the cost of borrowing for corporates and improve confidence of investors and issuers. This MI materially contributed to the Bank's decision to act as the market maker of last resort in secondary corporate bond markets.(3) The CBSMS was set up to purchase corporate bonds and revive trading activity by reducing price opacity.

Market intelligence was utilised to determine the size and design of the Scheme. Interactions with a variety of investors suggested that there was a sustained demand for corporate bonds. Investors were mainly reluctant to participate in the market due to prevailing illiquidity and would return to the market if market functioning improved. Therefore, the Bank did not need to buy a significant amount of bonds to resolve market dysfunction, but make regular small purchases of a wide range of bonds to make their prices transparent. (4) Market participants also advised on market conventions, such as pricing sources, strategies and settlement expectations. The Bank's MI gatherers communicated with around 80 contacts from over 25 firms while designing the Scheme.

Market intelligence also proved useful in assessing the CBSMS's impact and improving its effectiveness. Post-implementation, MI indicated that the Scheme had affected market liquidity positively by establishing prices. Market views were supported by data as indicators of liquidity started showing signs of recovery. By mid-2009, these indicators had slightly improved but they remained elevated compared to pre-crisis levels. Conversations with contacts highlighted persistence of illiquid conditions in secondary markets as banks' capacity to make markets remained restricted. It was reported that liquidity could be further

enhanced if the Bank extended the CBSMS to sell bonds. By ensuring that there would be a guaranteed seller (as well as buyer), the Bank could further strengthen confidence in corporate bond markets. Consequently, the Bank decided to sell corporate bonds acquired through the Scheme and improve liquidity on both sides of the market.

Insights gained through MI helped maximise the impact of the CBSMS. Market intelligence enabled the Bank to access key information about secondary market functioning from experienced market practitioners in a timely manner. This information added value to the Bank's work beyond what would have been achieved through data analysis alone. More recently, MI has been used similarly to inform the design of the Corporate Bond Purchase Scheme announced in August 2016.<sup>(5)</sup>

#### Market liquidity

In recent years, market intelligence contacts have increasingly noted the deterioration in market liquidity or the ability to trade at or close to the prevailing market price. The issue is important to market participants because resilient market liquidity plays a key role in the real economy in allowing them to obtain financing for investment and to manage their risks. And it is of interest to policymakers charged with safeguarding financial stability and using interest rate and bond markets to implement monetary policy. Concerns about the consequences of lower market liquidity were initially raised by dealer and hedge fund contacts and over time became more evident among a wider range of market participants as it became more apparent. The synthesised feedback from these discussions was reviewed extensively alongside a range of other inputs within the Bank and, in 2015, the Bank concluded(6) that the resilience of market liquidity was being affected by a range of factors including the regulatory impact on dealers' ability to make markets, as well as new technology, and evolving market structure.

A team was created at the FPC's request and staffed with members from different areas across the Bank to assess the

- (1) A key indicator for the liquidity premium was the increasing negativity in the credit default swap (CDS)/cash bond basis. This metric measures the prices of corporate bonds compared to the premium on CDS contracts on the same firm. The metric indicated that investors were demanding more compensation than explained by only the risk of default. For more details see 'Markets and Operations', Bank of England Quarterly Bulletin, Vol. 49, No. 1, pages 6–26; available at www.bankofengland.co.uk/ publications/Documents/quarterlybulletin/mo09feb.pdf.
- (2) After the collapse of Lehman Brothers, banks had experienced large losses due to the rise of default-related spreads in their corporate bond holdings. Consequently, they were no longer willing to hold bonds on their balance sheets and perform their role as market maker (an intermediary that buys and sells bonds, and therefore creates a marketplace).
- (3) The Bank's role as the market maker of the last resort is set out in the Red Book; available at www.bankofengland.co.uk/markets/Documents/money/publications/ redbook.pdf.
- (4) The Bank purchased a relatively small amount of corporate bonds (approximately £2 billion) through the CBSMS although these were spread across many firms.
- (5) See www.bankofengland.co.uk/publications/Documents/speeches/2017/speech955.pdf.
  (6) Including speeches from Minouche Shafik, see www.bankofengland.co.uk/publications/Documents/speeches/2015/speech855.pdf; Jon Cunliffe, see www.bankofengland.co.uk/publications/Documents/speeches/2015/speech853.pdf; and a Financial Stability Paper, see www.bankofengland.co.uk/financialstability/Documents/fpc/fspapers/fs\_paper34.pdf.

issue in more detail. Existing and newly collected MI helped to inform the Bank's analysis of the benefits of regulation on financial market resilience, as well as the impact on market liquidity.

Market liquidity can be difficult to observe and analyse. Market intelligence from contacts shed light on periods of changing market liquidity, for example, through episodes when volatility spiked such as the 'flash rally' in ten-year US Treasuries in October 2014. Market intelligence also helped in understanding the degree to which liquidity premia affected the relative price of different government bonds and the relationship between simple measures of trading costs. This intelligence helped make sense of conflicting signals from different market data-based measures of liquidity. For example, trading costs such as the price at which a security could be bought and sold (so-called bid-offer spread), had been relatively stable, while at the same time the ability to transact in size without moving price (so-called market depth), had diminished.

The MI on market liquidity was rich and helped the team to analyse different fixed-income segments. Experience from the Bank's different trading desks, meetings with large and small investors, dealers, trading platforms, and trade associations provided a range of views from different jurisdictions. These insights complemented desk-based analysis and modelling and helped enable the Bank to better understand trends in liquidity and the drivers for market participants' reactions, in particular regulation.

The team's review drew on MI along with detailed analyses and the supervisory perspective of these topics and shaped an analysis of market liquidity published in the July 2016 Financial Stability Report (FSR).(1) Among other things the FSR discussed how the most marked changes in market liquidity had been in repo markets; and that post-crisis regulations, including the leverage ratio, had probably been one of the drivers of these developments (but that some of the impact was likely to be transitory).

Among other conclusions, the FPC judged(2) it appropriate to adjust regulatory measures, where opportunities exist, to minimise their impact on the liquidity of core financial markets, without compromising their positive effect on resilience. They adopted this principle in their review of the leverage ratio framework.

The FPC also judged these developments to be sufficiently important to warrant further domestic and international assessment of their causes and consequences. Market intelligence allowed the Bank to be alert to the issue as it developed and continues to play an active role in assessing market liquidity.

#### Conclusion

By gathering information from financial market participants, the Market Intelligence function gets beneath the surface of financial market activity and data. Demonstrating its adaptability, MI has been gathered in some form since the Bank's inception. As an input alongside other forms of analysis and intelligence, MI continues to help inform policy formulation and implementation for all of the Bank's policy committees today, helping the Bank achieve its mission to promote the good of the people of the United Kingdom by maintaining monetary and financial stability.