Abstract

After the global financial crisis, large fund flows were recorded into and out of Hong Kong, especially following the launch of quantitative easing (QE) measures in the advanced economies. It would be interesting to analyse the different dimensions of fund flows into Hong Kong, i.e. Hong Kong dollar vs other currencies, resident vs non-resident, and where they have gone.

Several dimensions of fund flows activities are of analytical interests. For instance, how large is the scale of net flow into and out of Hong Kong during a particular period of time? Are the fund flows driven by non-resident or resident activities? Are they related to normal business activities, such as foreign direct investment or “hot money” entering different types of financial products and markets in Hong Kong?

This note sets out an analytical framework on fund flows into and out of Hong Kong, particular focus would be put on non-resident fund flows into stock and bond markets as well as the banking sector, as reflected in the Balance of Payments (BoP) statistics, since they are the most volatile and could enter or leave Hong Kong in a very short period of time.

Nevertheless, there are two caveats for using this approach. First, BoP transactions are not broken down into transactions involving different currencies. As such, the size and composition of fund flows in the BoP account will not exactly match the change in the aggregate balance and Exchange Fund Bills and Notes, the latter being a measure of Hong Kong dollar fund flows only. Second, BoP statistics can only provide data in relation to non-resident fund flows into resident shares, while the majority of non-resident fund flow into Hong Kong stock market may be more related to equity investment in Mainland enterprises, which constitute as much as 56% of Hong Kong stock market capitalization at end of March 2013.

Key Words: Fund flows, balance of payments, non-resident activities, Hong Kong
Introduction

Hong Kong is the world’s third largest international financial centre with no restrictions on fund flows and active participation of foreign investors. After the global financial crisis, there were large fund flows into and out of Hong Kong, especially following the launch of quantitative easing (QE) measures in the advanced economies. It would be interesting to analyse the different dimensions of fund flows into Hong Kong.

Several dimensions of fund flows into Hong Kong

2. Several dimensions of fund flows activities are of analytical interest. For instance, how large is the scale of net flow into and out of Hong Kong during a particular period of time? Are they denominated in Hong Kong dollar or other currencies? Are the fund flows driven by non-resident or resident activities? Are they related to normal business activities, such as foreign direct investment or “hot money” entering into different types of financial products and markets in Hong Kong? This paper sets out an analytical framework for fund flows into and out of Hong Kong, with particular focus on non-resident fund flows into the stock and bond markets as well as banking sector since they are the most volatile and could enter or leave Hong Kong at a very short period of time.

Analytical framework

3. In Hong Kong, Hong Kong dollar fund flows can be measured in terms of the change in the aggregate balance of banking system with the Hong Kong Monetary Authority (HKMA) (aggregate balance) and the outstanding balance of Exchange Fund Bills and Notes (EFBN). It is because when there are fund inflows, if converted into Hong Kong dollar, it will first lead to an increase in Hong Kong dollar deposits at the authorized institutions (AIs). This will then show up as a Hong Kong dollar liability to the banks concerned, matched by a corresponding increase in banks’ net foreign currency assets.

4. When there are continued huge inflows into Hong Kong as in the case of 2009, at some point AIs themselves may not necessarily wish to take on all the associated risks in having very large positions in foreign currency. Increased demand for Hong Kong dollar would result in increasing upward pressure on Hong Kong dollar exchange rate towards the strong side of the convertibility undertaking (CU), and when CU is
eventually triggered, there will be a corresponding increase in the aggregate balance, and also in the EFBN should the HKMA decide to absorb the abundance of liquidity in the banking system through issuing new EFBN.

5. It is of analytical interest to understand the nature of those fund flows, i.e. whether they are driven by non-resident or resident activities? And where they have gone? On this, the Balance of Payments (BoP) statistics can provide detailed information on the nature and patterns of cross-border fund flows (i.e. whether they are for direct investment, equity investment or just monies parked in the banking system).

6. The BoP summarises the economic transactions of an economy with the rest of the world, which consists of two broad accounts: (1) the current account, which covers transactions involving goods, services, primary and secondary income; and (2) the financial and capital account, which covers transactions involving financial claims and liabilities, as well as capital transfers. The financial and capital account is further decomposed into reserve assets and the non-reserve portion, the former reflecting activities of the central bank and the latter private fund flows. The non-reserve financial account of BoP comprises the following components:

   (1) Direct investment: when an entity in one economy obtains a lasting interest in an enterprise unit in another economy;
   (2) portfolio investment: defined as transactions in financial instruments, including equity securities, debt securities and money market instruments;
   (3) other investment: it mainly comprises trade credits, loans, currency and deposits, as well as other assets and liabilities (such as miscellaneous accounts receivable and payable); and
   (4) financial derivatives: they consist of transactions of financial derivatives such as options and warrants.

7. The focus of this paper is on fund flows that are of a more volatile nature, specifically, on equity and debt securities (reported as portfolio investment transactions) and fund flows into the banking sector (reported as other investment transactions). This is to delineate from other fund flows that are considered to be of long-term nature, for example, direct investment, and hence which should carry relatively little implications on the financial and economic stability of Hong Kong.
Nature of fund flows

8. After the global financial crisis and implementation of several rounds of QE by the advanced economies, there were huge amount of fund flows into Hong Kong. The resulting increase in demand for Hong Kong dollars led to the strengthening of the Hong Kong dollar exchange rate towards the strong side of the CU, and when the CU was triggered, the HKMA had to provide the required Hong Kong dollar liquidity into the banking system. As such, a total of HK$ 646.2 billion of Hong Kong dollar was injected into the banking system during the period after the US Federal Reserve provided huge emergency liquidity and implemented QE1 (September 2008 to March 2010). No further injection was recorded during QE2 (November 2010 to June 2011), while another HK$ 107.2 billion was injected since QE3, mostly between September 2012 and December 2012. There was however no more injection recorded after end 2012 (Diagram 1). These injections were reflected in an increase in the aggregate balance and in outstanding balance of EFBN as new bills and notes were issued to absorb the excess liquidity. However, the abovementioned data from HKMA does not provide any information about the nature of fund flows, i.e. resident or non-resident, and where they have gone.

Diagram 1: Substantial Hong Kong dollar fund inflows into Hong Kong after the outbreak of global financial crisis

![Diagram 1](image_url)

9. The non-reserve financial account of BoP statistics, which measures net private fund flows into Hong Kong, similarly recorded net substantial inflows of HK$ 435.9 billion during QE1 (fourth quarter of 2008 to first quarter of 2010). The fund inflows then quieted down since early 2010, albeit with considerable ups and downs from time to time over the past three years in tandem with the shifts between the
risk-on and risk-off sentiment in the global financial markets. No significant net inflows, i.e. HK$ 0.2 billion only, were recorded during QE2 (fourth quarter of 2010 to second quarter of 2011), while another HK$ 62.6 billion net inflows were recorded since QE3 (fourth quarter of 2012). The size of net fund flows was somewhat smaller than the one measured on the basis of Hong Kong dollar aggregate balance and EFBN, but the direction of flows was largely in line with each other. In more details, portfolio and other investments were the main source of net fund flows, and also the source of volatility in fund flows, over the past few years (Diagram 2). It is worth noting that further breakdown of BoP data by currencies are not available. This may explain why Hong Kong dollar fund flows as depicted by the aggregate balance might not tally exactly with total fund flows under the BoP account.

Diagram 2: Net fund flows were mainly driven by portfolio and other investment*

Note: A large change in the composition of net fund flows in Q4 2010 was due to the listing of American International Assurance (Hong Kong). Direct investment in Hong Kong was reduced by its non-resident parent company, while portfolio investment liabilities would increase if the newly listed shares were purchased by non-resident investors.

10. Fund flows can also be analysed in terms of the movements of fund flows by residents and non-residents. At the height of the global financial crisis between late 2008 and early 2009, fund inflows were mainly driven by repatriation of funds by local banks and resident individuals from overseas back to Hong Kong, cushioning to a large extent the concurrent outflow of funds by non-residents from Hong Kong and back to their home countries. In net terms, there was thus only a modest fund outflow in late 2008. However, starting from the third quarter of 2009, fund inflows into Hong Kong were dominated mostly by non-resident fund flows. The exceptions were in the fourth quarter of 2011 and third quarter of 2012 when there were brief periods of non-resident fund outflow as the global financial markets came under exceptional shocks after the downgrade of the US credit rating and the intensification of eurozone crisis (Diagram 3).
Diagram 3: Non-resident fund inflows since Q3 2009, except for brief relapses in mid 2011 and mid 2012

11. If further analysed by the nature of fund flows, non-resident fund inflows in the past few years mainly went into the banking sector. Non-resident fund flows in relation to portfolio investment were more volatile, yet in a much smaller scale, when measured under the BoP account (Diagram 4). However, it has to be noted that the actual investment flows into the local stock market were probably of a much larger size, because the BoP statistics do not capture information on non-resident fund flows into non-resident shares.

Diagram 4: Non-resident fund flows by component*

Note: Measured in terms of the change in external liabilities in the various components under the BoP account in Hong Kong
12. Given the role of Hong Kong as the premier financial centre serving China, non-resident fund inflows into Mainland’s equity shares listed in Hong Kong Stock Exchange are likely to show up as an inflow into Hong Kong’s banking system, at least initially. As such, activities related to non-resident investment in non-resident shares listed in Hong Kong might have been subsumed under the component of bank deposits (other investment), resulting in some positive correlation between non-resident bank deposit (other investment) and the amount of equity fund raised in Hong Kong (Diagram 5).

**Diagram 5 : Non-resident fund flows into banking sector likely to be partly related to subsequent investment in non-resident Mainland equities in Hong Kong Stock Exchange**

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\[ \text{Diagram 5} \]
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**Concluding remarks**

13 After the global financial crisis, large amount of fund flows have entered into Hong Kong, and their direction and composition of fund flows have changed dramatically under the ever changing economic conditions over the past few years. BoP statistics provide valuable inputs for analysing the sources of fund flows and their destination.

14. Nevertheless, there are two caveats for using this approach. First, BoP transactions are not broken down into transactions involving different currencies. As such, the size and composition of fund funds in the BoP account will not exactly match the change in the aggregate balance and Exchange Fund Bills and Notes, the latter being a measure of Hong Kong dollar fund flows only. Second, BoP statistics can only provide data in relation to non-resident fund flows into resident shares, while the majority of non-resident fund flow into Hong Kong stock market may be more
related to equity investment in Mainland enterprises, which constitute as much as 56% of Hong Kong stock market capitalization at end of March 2013.

References


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Table 1: Total fund flows into and out of Hong Kong (HK$ Billion)

|                  | Q1/08 | Q2/08 | Q3/08 | Q4/08 | Q1/09 | Q2/09 | Q3/09 | Q4/09 | Q1/10 | Q2/10 | Q3/10 | Q4/10 | Q1/11 | Q2/11 | Q3/11 | Q4/11 | Q1/12 | Q2/12 | Q3/12 | Q4/12 |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| **Financial non-reserve assets** |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Residents (Portfolio and other investment assets) | 188.0 | -68.8 | -115.8 | 208.5 | 126.8 | 93.0 | -4.0 | 34.3 | -172.5 | -123.2 | -397.7 | -473.6 | -267.3 | -449.7 | -475.3 | 255.5 | -214.7 | 22.4 | 120.7 | -311.0 |
| Portfolio investment | 59.7 | -38.1 | 123.9 | -334.8 | 50.2 | -275.0 | -59.2 | -109.7 | -202.8 | -45.0 | -109.3 | -269.4 | 6.1 | -100.5 | -156.8 | 95.4 | 79.0 | 11.4 | -133.3 | -226.3 |
| Equity | -159.9 | 2.2 | 45.6 | -31.6 | -42.2 | -16.9 | -25.2 | -115.6 | -125.4 | -107.3 | -2.6 | -129.7 | -55.0 | -84.8 | -148.9 | 51.4 | 83.4 | -27.5 | -84.3 | -105.3 |
| Debt securities | 219.5 | -40.3 | 78.3 | -303.2 | 92.4 | -258.1 | -34.0 | 5.9 | -77.4 | 62.3 | -106.7 | -139.7 | 61.1 | -15.7 | -7.9 | 44.0 | -4.4 | 38.9 | -49.0 | -121.0 |
| Other investment | 128.3 | -30.7 | -239.7 | 543.3 | 76.6 | 368.0 | 55.2 | 144.0 | 30.3 | -78.2 | -288.3 | -204.1 | -273.4 | -349.2 | -318.5 | 160.1 | -293.8 | 11.0 | 254.0 | -84.6 |
| **Non-residents (Portfolio and other investment liabilities)** | -222.7 | 122.6 | 7.6 | -288.9 | -94.6 | -11.2 | 138.6 | 191.9 | 130.1 | 99.1 | 398.3 | 617.5 | -223.4 | 489.3 | 409.1 | -232.2 | 300.0 | -7.3 | -115.9 | 416.1 |
| Portfolio investment | -247.5 | 118.2 | 83.6 | -46.1 | -5.8 | 42.4 | 10.3 | 36.6 | 19.4 | -1.1 | 16.4 | 149.3 | 14.3 | 33.8 | 64.5 | 32.3 | 115.9 | 6.3 | 79.6 | 54.9 |
| Equity | -57.2 | 145.1 | 74.0 | -26.1 | 1.3 | 35.7 | 4.7 | 31.5 | -1.6 | -4.1 | 6.9 | 142.3 | -20.8 | 15.7 | 43.6 | 8.7 | 74.5 | 2.4 | 65.7 | 51.3 |
| Debt securities | -190.3 | -27.0 | 9.6 | -19.9 | -7.1 | 6.7 | 5.7 | 5.0 | 21.0 | 3.0 | 9.5 | 7.1 | 18.1 | 21.0 | 23.6 | 41.4 | 3.8 | 13.9 | 3.6 |
| Other investment | 24.8 | 4.5 | -75.9 | -242.8 | -88.9 | -53.6 | 128.3 | 155.3 | 110.6 | 100.2 | 381.9 | 468.2 | 209.1 | 455.5 | -264.5 | 184.1 | -13.5 | -195.5 | 361.2 |

Source: Extract from the financial account of Balance of Payments statistics, Census and Statistics Department, Hong Kong Special Administrative Region Government