Box 2.3

What can we learn from the previous US interest rate upcycles?

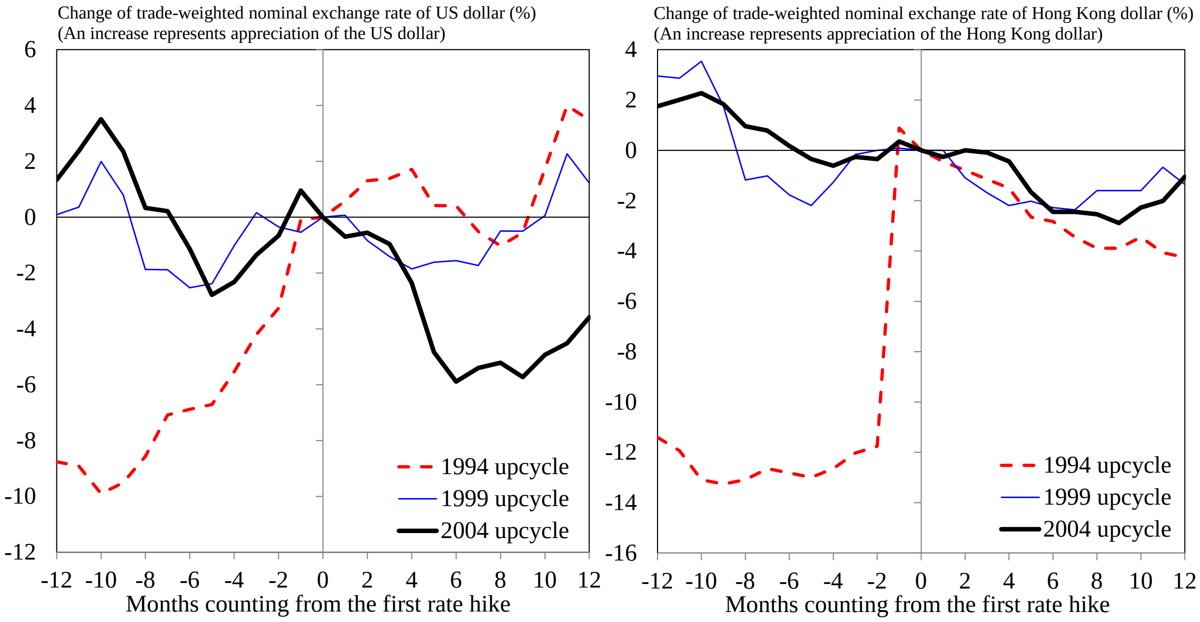
The US Federal Reserve (Fed) raised the range of its target federal funds rate by 25 basis points to 0.25%-0.50% in December 2015, marking a turning point of its super-low interest rate policy. Given the sheer importance of the US economy, the change in its monetary policy direction would not only affect its own economy, but inevitably also have significant implications for Hong Kong and the rest of the world. It would therefore be useful to examine what can be learned from the previous US interest rate upcycles.

This note covers the previous three US interest rate upcycles since 1990s. The first US interest rate upcycle took place between February 1994 and February 1995, when the Fed successively raised interest rates by 3 percentage points to 6%. The second one lasted from June 1999 to May 2000, with the US federal funds rate going up six times by a total of 1.75 percentage points to 6.5%. The most recent one occurred during June 2004 to June 2006, when the Fed increased interest rate 17 times from a low level of 1% to 5.25%.

Under the Linked Exchange Rate System, the movements of the Hong Kong dollar against other currencies will follow those of the US dollar. Other things being equal, increases in short-term US interest rates theoretically would lead the US dollar to strengthen. A strong US dollar would potentially reduce the price competitiveness of Hong Kong's exports and hence is a concern for us. However, the actual play-out of the US dollar in the past after US rate hikes varied, as other moving parts also mattered. For example, in anticipation of US interest rate upcycles, the broad trade-weighted US dollar index had already been on an uptrend during the six months before the first rate hike, reflecting that the market had generally priced in the expected effect of the hike (***Chart 1***). In the 2004 upcycle, the US dollar fell visibly after the initial rate hike, due mainly to concerns about widening US current account deficits, while the commodity investment boom and strong global economy generated appreciation pressure on many emerging market currencies.

Chart 1 : The direction of the currency movements one year after the first rate hike varied in the past interest rate upcycles

(a) US dollar trade-weighted index **(b) Hong Kong dollar trade-weighted index***

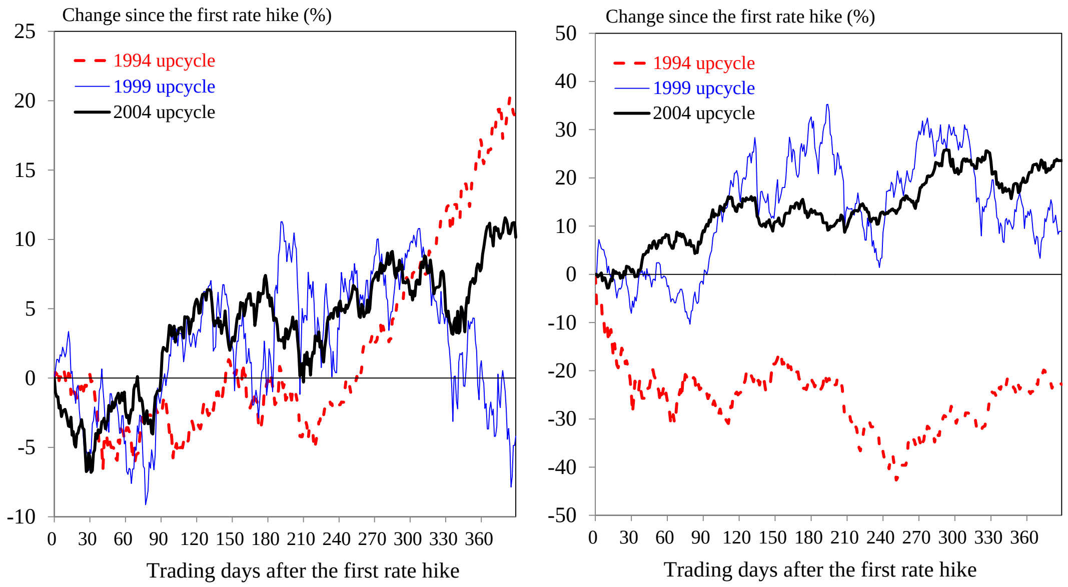


Note: (*) The sharp rise in the Hong Kong dollar's trade-weighted nominal exchange rate before the 1994 interest rate upcycle was due mainly to the one-off adjustment of the Renminbi amid the unification of the official Renminbi exchange rate and swap market exchange rate.

Box 2.3 (Cont'd)

Chart 2 : Stock markets showed diverged movements in the past three episodes

(a) S&P 500 Index in the US **(b) Hang Seng Index in Hong Kong**



As for the stock markets, the US interest rate hikes were rather steep and abrupt during the 1994 upcycle, amounting to 300 basis points in 13 months. Aggressive portfolio rebalancing resulted in visible declines in Hong Kong's stock prices (***Chart 2***), with particular pressure on financial and property stocks. In the other two episodes, the US interest rate lift-offs were more gradual, while the global business cycle generally held up. These favourable factors helped contribute to the resilience of corporate earnings and counter the negative impacts on investment sentiment arising from US monetary tightening during the period.

On economic performance, rising interest rates *per se* in theory have adverse impacts on private domestic demand, which could be a troubling concern. Firstly, higher interest rates weaken household and corporate spending directly by raising borrowing costs. The IMF in a recent study found that a 300-basis-point increase in mortgage rates could reduce household consumption by about 7-8 percent, and a 300-basis-point increase in interest rates could trim corporate investment by 0.5-1 percent[(1)]. Besides, there are also indirect channels imparting negative influences. Corrections in local asset prices in response to higher interest rates could dampen private consumption via negative wealth effects. If the US rate lift-off proceeds abruptly and sends shockwave around the world, the resulting global economic and financial headwinds could further undermine local economic performance.

Comparing the past three US interest upcycles, the headwinds to Hong Kong's economy were most visible in the one that began in February 1994. In this occasion, the steep interest rate rises heightened global financial volatility. Growth of major advanced economies also decelerated visibly towards the end of this upcycle, which added a further drag on Hong Kong's economic performance. Significant fluctuations in local asset prices were also seen after the initial rate hike, with bearings on consumption sentiment via wealth effects.

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(1) IMF Staff Report of Hong Kong Special Administrative Region, People's Republic of China, "Box 2: The Impact of Rising Interest Rates on Domestic Demand in Hong Kong SAR", January 2016.

Box 2.3 (Cont'd)

On the other hand, the negative impacts in the other two episodes were more muted, being diluted by other positive developments. In the interest rate upcycle that began in June 2004, Hong Kong's real GDP growth managed to stay robust after the rate hike, as the solid global economic growth as well as strong local cyclical economic upturns after a prolonged period of setback prevailed. In the upcycle that began in June 1999, Hong Kong's economic growth actually picked up notably in the year after the rate hike, though this was merely due to the waning of the recessionary pressures from the Asian Financial Crisis. In fact, local mortgage rates actually fell back visibly right before this US interest rate upcycle as the risk premium receded. Moreover, many regional economies also recovered vigorously during 1999 from deep recession. These tailwinds powered Hong Kong's economy to shake off the recession in 1998 and rebound strongly in 1999.

In sum, the past experiences suggest that the impact of US interest rate hikes is not only contingent on the pace and magnitude of the hikes, it also critically hinges on other macroeconomic factors and their dynamic interactions. At this juncture, the pace of US interest rate normalisation is still subject to uncertainties and data-dependent. In late January, the Federal Open Market Committee indicated their concerns about the heightened global financial market volatility, while US economic growth in the fourth quarter of 2015 slowed visibly, greatly reducing expectation for a March rate hike. The uncertain growth momentum of the US, increasing monetary policy divergence among major central banks, and the recent fluctuations in global financial markets would continue to complicate the US interest rate outlook. Any unexpected policy action by the Fed could bring about further ramifications to the global economy via the complex financial channels.

Moreover, the US interest rate lift-off this time began under exceptional global economic circumstances. In particular, the global economy seems to have entered a protracted period of slow growth in the post-crisis period. The US interest rates had hit nearly zero for seven years. Unconventional monetary policies in major advanced economies flooded global financial markets with liquidity glut, buoying asset valuations in different parts of the world. Vulnerabilities in those emerging markets with weaker fundamentals have built up. Besides, the divergence of monetary policies among major central banks is fairly pronounced and the degree of global integration of financial markets is at a historic high.

Since mid-2015, the local stock market has followed the global trend and undergone significant corrections. Local housing market has also consolidated of late. Fluctuations in local asset prices, if continued, will likely have dampening effects on consumption demand through negative wealth effects. Besides, the strengthening of the US dollar seen in the past year, if continued, may induce additional downward pressures on Hong Kong's exports and inbound tourism. Yet our main concern stemming from the US interest rate normalisation is that it may interact with the exceptional global circumstances this time in such a vicious way that leads to an acute economic slowdown and financial dislocations around the world, with consequential impacts on Hong Kong's economic performance.

Hong Kong, with a sound financial system and strong fundamentals, is more than capable to handle the abrupt changes in financial conditions and capital flows and navigate through the ups and downs of the global economy. The macro-prudential measures taken in the past few years in preparation of the eventual normalisation of interest rates have also strengthened the resilience of the financial system. The healthy position of current account balance, the absence of external debt by the government, and the strong net external financial asset position would also distinguish Hong Kong from economies with weaker fundamentals in other parts of the world. Yet, given the wide fluctuations of the financial markets since the beginning of this year, an important lesson from the past is to exercise risk management with a view to containing the impacts from any unanticipated adverse developments.