# **Staff Notes**

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# Is the PKR Overvalued?

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## **Disclaimer**

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#### I. Introduction

There is a view among exporters that Pakistan has not been able to benefit from the GSP plus status in the EU, primarily due to an overvalued PKR.<sup>2</sup> Some analysts also believe that unless the PKR is weaker, Pakistan will not be able to address the issue of stagnant exports. Although the concerns over PKR overvaluation are not new, these have become louder ever since the PKR went through a massive rally almost a year ago (it gained 5.1 percent in just 3 days to reach PKR 98/\$).<sup>3</sup> Most viewed this abrupt PKR appreciation positively, while some were critical, viewing this as a deliberate act by the government, to fulfill an earlier promise.

Pakistan's multilateral exchange rate index, adjusted by inflation – Real Effective Exchange Rate – REER, has been appreciating since March 2014, and its current level is much higher than the average seen in the previous decade (**Figure 1**). This appreciation has become a source of concern among many economists and analysts in Pakistan, since this theoretically implies a loss of competitiveness of domestic products.

This note will assess the claims of PKR overvaluation, and whether SBP has played a role in achieving the exchange rate stability that the country recently enjoys. We will also take a close look at the PKR parity not just against the US Dollar, but also against other hard currencies, which are key trade partners for Pakistan. This analysis also accounts for monetary developments in advanced economies, and resulting fluctuations in the global currency market. In the end, we will discuss possible repercussions of REER appreciation, and policy options available to SBP.

The REER has been appreciating since March 2014, and is currently higher than the in the past decade.



Figure 1: Trend in Real Effective Exchange Rate (REER)

<sup>&</sup>lt;sup>2</sup> For instance, see <a href="http://www.dawn.com/news/1170226/falling-exports-worry-aptma">http://www.dawn.com/news/1170226/falling-exports-worry-aptma</a>

<sup>&</sup>lt;sup>3</sup> The PKR had gained 5.1 percent between 10<sup>th</sup> and 12<sup>th</sup> March 2014.

## II. Overvaluation: The Concept is not Robust

There is no 'equilibrium' exchange rate: The FEER, BEER, DEER, NATREX, etc., provide different numbers.... this equilibrium is also period dependent. In plain terms, a currency is considered overvalued, when the real effective exchange rate consistently stays above the equilibrium level. However, assessing this 'equilibrium' level is not a straightforward exercise. Economists have developed a number of quantitative methodologies to determine this – each one unique in its focus; objective; conceptual framework, underlying assumptions; and empirical construction (**Box 1**).<sup>4</sup> These conceptually-distinct equilibria can be calculated using various estimation techniques, including reduced-form equations, partial equilibrium models, and general equilibrium models. It is up to the policy makers to decide, which methodology is more relevant, and supplement it with more intangible (but real) issues that cannot be captured by hard economic data.

### Box 1: Equilibrium Exchange Rate: Assessment Methodologies

There are various methodologies to gauge the equilibrium level of real exchange rate. These are listed below:

- 1. **Purchasing Power Parity (PPP):** The absolute PPP hypothesis states that the exchange rate between the currencies of two countries, should equal the ratio of the price levels of the two countries. Therefore, *everything else constant*, an increase in local prices should increase the exchange rate, i.e., a depreciation of local currency. Therefore, PPP assumes a constant equilibrium level of exchange rate.
- 2. **PPP with Balassa-Samuelson (B-S) Effect**: PPP with B-S effect allows for variations in the equilibrium exchange rate. This theory predicts that a productivity gain in the domestic tradable sector causes an increase in the relative price of non-tradable goods, which it turn, causes an appreciation of the REER.
- 3. **Fundamental Equilibrium Exchange Rate (FEER):** Williamson (1994) defined the FEER as a real effective exchange rate that simultaneously achieves internal and external balances in the economy. While internal balance is achieved when the economy is at full-employment level, external balance is characterized as a sustainable balance of payments position in the medium-term horizon. Since full-employment level is difficult to be identified, it is assumed that "the adjustment process assures internal balance when external balance is achieved". This leaves FEER estimation as a two-step process: (i) identify the current account as a function of the real effective exchange rate; and (ii) solving for the equilibrium exchange rate by *imposing* macroeconomic balance in the economy. The FEER approach allows the equilibrium exchange rate to move in response to changes in underlying fundamentals.
- 4. **Desired Equilibrium Exchange Rate (DEER):** The FEER framework can be modified further by incorporating a targeted or a desired current account, instead of applying the condition of external balance. This variant of FEER is commonly known as Desired Equilibrium Exchange Rate (DEER). The calculation of DEER is methodically the same as of FEER, but the estimates are driven by what policymakers want (e.g., a current account deficit of 1 percent of GDP).
- 5. **Behavioral Equilibrium Exchange Rate (BEER):** The BEER approach distinguishes between the long-term economic fundamentals that influence the equilibrium real exchange rate, and short-term interest rate differentials. This approach does not assume a 'balance' in the internal and external sectors, and estimates the equilibrium exchange rate using current values of fundamentals including terms of trade, fiscal balance, productivity, debt levels, etc. An important assumption is that uncovered interest parity influences short-term behavior of the exchange rate.

<sup>&</sup>lt;sup>4</sup> Isard, Peter (2007), Equilibrium Exchange Rate: Assessment Methodologies, IMF Working Paper, WP/07/296

- 6. **Permanent Equilibrium Exchange Rate (PEER):** A major problem with FEER/BEER/DEER is that these approaches do not identify the difference between short-term and long-term values of macroeconomic fundamentals. However, it may be argued that prevailing levels of fundamentals could deviate significantly from their long-term "sustainable" levels. The PEER approach decomposes the real exchange rate into temporary and permanent components, and then derives the equilibrium level considering only the long-term "sustainable" levels of macroeconomic fundamentals. Therefore, the difference between actual real exchange rate and FEER/DEER/BEER is called 'current misalignment', whereas the difference between actual exchange rate and PEER is called 'total misalignment'.
- 7. **Natural Real Exchange Rate (NATREX):** The NATREX is defined as the exchange rate that would prevail if cyclical and speculative factors were removed, and the employment is at its natural rate. NATREX is "an artificial construct" toward which the actual exchange rate tends to adjust. It is not observable, and it "never actually prevails" (Allen, 1995).

#### The IMF approaches:

Exchange rate surveillance in member countries is one of the core responsibilities of the IMF. In 1995, the Consultative Group on Exchange Rate Issues (CGER) was established within the Fund to strengthen its capacity to evaluate the current account positions and exchange rates of member countries. There are basically three complementary approaches that are used by the CGER; broadly speaking these are specific approaches to calculate FEER and BEER with some modifications. Following is how the IMF explains its framework:

- 1. *The Macroeconomic Balance (MB) Framework*: "First, an equilibrium relationship between current account balances and a set of fundamentals, is estimated with panel econometric techniques. Second, for each country, equilibrium current accounts ("CA norms") are computed from this relationship as a function of the levels of fundamentals projected to prevail in the medium term. Third, the real exchange rate adjustment that would close the gap between the estimated CA norm and the underlying current account balance is computed."
- 2. **Equilibrium Real Exchange Rate (ERER):** "First, panel regression techniques are used to estimate an equilibrium relationship between real exchange rates and a set of fundamentals. Second, equilibrium real exchange rates are computed as a function of the medium-term level of the fundamentals. Third, the magnitude of the exchange rate adjustment that would restore equilibrium is calculated directly as the difference between each country's actual real exchange rate and the equilibrium value identified in the second step."
- 3. External Sustainability Analysis: It consists of three steps. The first involves determining the trade or current account balance to GDP ratios that would stabilize the net foreign asset position at given 'benchmark' values. The second step compares these NFA stabilizing trade or current account balances with the level of a country's trade or current account balance expected to prevail over the medium term. And finally, the third step consists of assessing the adjustment in the real effective exchange rate that is needed to close the gap between the medium-term trade and current account balances and the NFA stabilizing trade and current account balances.

#### Sources:

- Isard, P. (2007). Equilibrium Exchange Rates: Assessment Methodologies. IMF Working Paper, No. 07/296.
- Siregar Y. Reza (2011). The Concepts of Equilibrium Exchange Rate: A Survey of Literature. Staff Paper No. 81. The SEACEN Center, Kuala Lumpur, Malaysia
- Yuki, Masujima (2015). Assessing Asian Equilibrium Exchange Rates as Policy Instruments. REITI Discussion Paper Series 15-E-038.
- iv. Methodology for CGER Exchange Rate Assessments, IMF, Prepared by the Research Department.
   Approved by Raghuram G. Rajan. Approved by Raghuram G. Rajan

Aside from the technical discussions about the various methodologies available to gauge whether a currency is over or undervalued, economists have found other ways to judge whether a currency is misaligned. One is by examining whether the central bank is

influencing the demand-supply of currencies in the interbank FX market. More specifically, if a central bank is consistently selling US\$ in the FX market, the exchange rate (local currency in terms of one US Dollar) is considered to be overvalued. In Pakistan's case, SBP's management of the Rupee-Dollar parity in the past year, would show that the PKR is *actually* undervalued.

Another more simple way is to look at the REER. Theoretically, under PPP, there should be no change in REER overtime (it should be 'mean reverting'), unless there is a significant shift in the country's trade policies, tariffs, transportation costs, levels of productivity and technology used.

**Bottom line:** In our view, "equilibrium exchange rates": The FEER, BEER, DEER, NATREX, etc., provide different equilibria levels, focusing on different variables. Furthermore, the "equilibrium" exchange rate is period dependent, and strongly influenced by prevailing macroeconomic fundamentals and policy parameters. In effect, the concept of over/undervaluation is subjective.

# III. PKR Overvaluation: Empirical Results are Mixed

If a central bank sells
US\$ in the FX market,
the exchange rate is
considered overvalued
- the local currency is
kept artificially strong.

A number of attempts have been made to calculate Pakistan's equilibrium exchange rate, and the degree of misalignment. Results have been mixed – if not contradictory. For instance, Hyder and Mahboob (2005) used Engle Granger co-integration techniques to estimate equilibrium REER for Pakistan for the period FY78 to FY05. They identified three episodes of undervaluation (FY78-FY80, FY87-FY95, and FY03-FY05) and two episodes of overvaluation (FY81-FY86 and FY96-FY98). Three years later, Hussain (2008) used maximum likelihood co-integration procedures in a vector autoregressive (VAR) system to answer the same question. Unlike Hyder and Mahboob (2005), this study estimated that the REER had remained overvalued over the entire period, *including* the years between FY00 and FY07.

The next year, Ahmed (2009) specifically tested the impact of capital inflows on the real exchange rate in Pakistan. Covering the period from FY72 to FY07, a major objective of this study was to test the Dutch Disease hypothesis. Results were a confirmation of Hussain (2008): the PKR remained overvalued between FY01 to FY07. The key finding of this study was the increase in remittances between FY02 and FY07, and a sharp rise in FDI between FY05 and FY07, were major reasons for the persistent overvaluation of the PKR.

<sup>&</sup>lt;sup>5</sup> Hyder, Z. and Mahboob, Adil (2006). "Equilibrium Real Effective Exchange Rate and Exchange Rate Misalignment in Pakistan." SBP Research Bulletin, 2: 237-263.

<sup>&</sup>lt;sup>6</sup> Hussain, Shah (2008). "Sources of Real Exchange Rate Misalignment Evidence from Pakistan". SBP Working Paper No. 26, 2008.

<sup>&</sup>lt;sup>7</sup> Ahmad, Hamna (2009). "Capital Flows and Real Exchange Rate Overvaluation – A Chronic Ailment: Evidence from Pakistan". *Lahore Journal of Economics*, Vol. 14, Special Edition, 2009.

<sup>&</sup>lt;sup>8</sup> The mechanism of Dutch Disease works as follows: an increase in remittances and/or capital inflows (like external loans) will make the country's currency stronger. This makes the country's other exports more expensive for other countries to buy, and imports cheaper. In other words, the real sector becomes less competitive.

In April 2009, the IMF came up with its own evaluation of PKR misalignment, using three complementary approaches: <sup>9</sup> (i) the 'macroeconomic balance' approach (the REER was found to be <u>overvalued by about 5-10 percent</u>); (ii) the 'equilibrium exchange rate' approach (the IMF found the PKR to be <u>2 percent above the equilibrium</u>); and (iii) the 'external sustainability analysis' (this showed that "in real effective terms, the rupee is <u>about 7 percent above the value</u> needed for the current account deficit to decline to stabilize the ratio of Pakistan's net foreign liabilities to GDP at its 2007 level".

Using one technique, the IMF found the PKR to be overvalued in 2012; using other techniques, it estimated the PKR to be in line with fundamentals.

In February 2012, the IMF significantly reduced its view of PKR overvaluation. <sup>10</sup> Using the 'macroeconomic balance' approach, the REER was found to be <u>overvalued by about 10</u> <u>percent;</u> using the 'equilibrium exchange rate' approach, the IMF found that "a comparison of current level of the REER and an estimate of its medium-term equilibrium value indicates that it is <u>broadly in line with fundamentals</u>"; and the 'external sustainability' analysis showed that assuming a net international reserves of (negative) 30 percent of GDP, REER is <u>broadly in line with fundamentals</u>.

In 2014, Debovics and Saeed revisited this policy question.<sup>11</sup> Using the behavioral equilibrium exchange rate approach, they found the IMF's estimate of 10 percent overvaluation to be on the lower side. Their estimate of overvaluation was 25 percent for the year 2010!

**Bottom line:** Estimates for PKR misalignment are not empirically robust. Different techniques and sample sizes, have produced different results. While useful, there are serious inconsistencies in the magnitude of over/undervaluation. In our view, these mechanical tools can be helpful, but cannot be a *strict* guide to policymakers.

## IV. Is the PKR Overvalued? Key Diagnostics

If SBP's recent intervention is any indication, the PKR has been undervalued since March 2014. • **SBP Support to the US Dollar**: There are many who suspect that it was SBP that injected US Dollars into the FX market, to bring the parity down to 98/\$ in March 2014. However, this was not the case. There were absolutely no FX injections by SBP; the PKR appreciated because of the market's response to the surprise receipt of a Saudi grant of US\$ 1.5 billion, and the expectation of a deferred oil facility that Pakistan was given in 1998.

When Pakistan approached the IMF for an Extended Fund Facility in July 2013, there were only US\$ 6 billion in SBP's reserves, which was not sufficient to cover two months of imports. The net international reserve (NIR) position was worse: it was *negative* 2.4 billion. As documented in the IMF Country Report No. 13/287, the IMF set the precondition for SBP to purchase \$125 million from FX market by end-August 2013, to start

<sup>&</sup>lt;sup>9</sup> Pakistan: 2009 Article IV Consultation and First Review under the Stand-By Arrangement. IMF Country Report No. 09/123
<sup>10</sup> Pakistan: 2011 Article IV Consultation and Proposal for Post-program Monitoring. IMF Country Report No. 12/35

<sup>&</sup>lt;sup>11</sup> Debovics, Dario and Saeed, Wajiha (2014). "Exchange Rate Misalignment in Pakistan and its General Equilibrium Distributional Implications". International Food Policy Research Institute, Working Paper No. 016, February 2014.

<sup>&</sup>lt;sup>12</sup> The IMF defines NIR as the dollar value of the difference between usable gross international reserve assets and reserve-related liabilities, evaluated at the program exchange rates.

building its NIR. Furthermore, it also set floors on SBP's NIR as a part of quarterly quantitative targets.

Pressures to depreciate the PKR b/w Jul-Nov 2013, were getting difficult to manage. The Finance Minister's warning in Dec 2013 (PKR98/\$), was perhaps an attempt to rationalize market expectations. In the first quarter of the program, i.e., Oct-Dec 2013, SBP purchased US\$ 100 million from the FX market. However, it stepped up its reserve build-up from Jan-Mar 2014 onwards, in which it purchased US\$ 575 million from the FX market – recall that this was the quarter in which the PKR had appreciated by 6.9 percent. This was followed by another US\$ 1 billion purchased in Apr-Jun 2014. In the first 9 months of the current fiscal year, SBP has purchased over US\$ 1.8 billion from the FX market, which takes the cumulative purchases to over \$3.5 billion between July 2013 to April 2015 (this amount exceeds the full-year current account deficit in FY14). Imagine if SBP had not purchased this FX that created an artificial demand for US Dollars: the PKR would have appreciated much more. If a central bank's interventions are any indication regarding the currency alignment, then the PKR is undervalued, and has been undervalued since early 2014.

• Sentiments Sometimes Rule the Market – A Unique Episode: Exactly 3 months before the receipt of the Saudi grant, Pakistan's Finance Minister had publicly claimed that the government would bring the exchange rate to PKR 98/\$; in our view, this statement was designed to discourage dollar holdings. At that time, 14th December 2013 to be precise, the PKR parity was over 107. It is important to view this statement in the context of developments in the FX market. The PKR had depreciated by 7.9 percent from July 2013 upto the first week of December. The size of the current account deficit – the real pressure on the interbank FX market – was not large enough to have such an impact on the exchange rate. There were tremendous speculative pressures on the PKR in the wake of lumpy payments to the IMF. The FX market was anxious: importers were buying forward, whereas exporters were holding back their FX proceeds in anticipation of further PKR depreciation. Therefore, the Finance Minister's warning could be seen as an attempt to rationalize market expectations.

The market ignored this warning. But the PKR did appreciate in December, because of improvement in FX flows. However, the market did not buy this immediately. The 98/\$ 'forecast' appeared too unrealistic to be taken seriously. The PKR did appreciate somewhat in December, but this can be traced to an improvement in balance of payments during the month. In fact, the PKR parity had already plateaued on 9<sup>th</sup> December, and had shed 0.9 percent in the next 4 days (*before* these claims were made). The current account surplus for December 2013, coupled with the expectations of the EFF disbursement, further reduced pressures on the PKR. Later in March 2014, when the Saudi grant was made public, and there was a sea change in market sentiments, traders panicked and aggressively sold their dollar holdings.

<sup>13</sup> FX purchase data in this paragraph is sourced from Country Report on Pakistan, compiled by the IMF.

<sup>&</sup>lt;sup>14</sup> The IMF has set floors on SBP net international reserves (NIR), which are to be met every quarter; SBP has been building its NIR primarily through spot purchases.

<sup>15</sup> http://tribune.com.pk/story/645537/cash-in-finance-minister-warns-exchange-rate-about-to-fall/

<sup>&</sup>lt;sup>16</sup> This claim came under public criticism on three grounds: (i) the target of 98 per US\$ appeared too imaginative; (ii) this proclamation could be manipulative for the FX market; and (iii) it gave an impression as if the government would itself 'pull down' the PKR parity – a compromise on market-determined exchange rate.

<sup>&</sup>lt;sup>17</sup> Important to recall here who the Finance Minister was addressing to while making such claims: the All Pakistan Textiles Mills Association (APTMA) – association of the largest export sector of the economy.

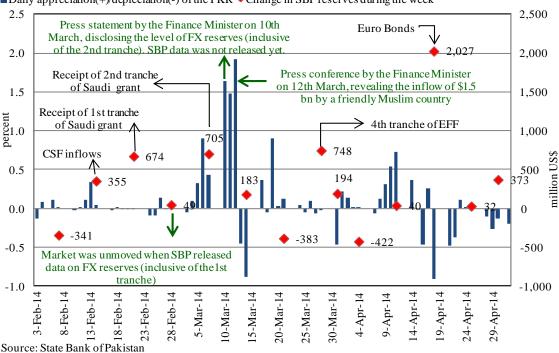
**Market sentiments** changed radically in the 2nd week of March 2014.

More specifically, Pakistan received the Saudi grant in two tranches of US\$ 750 million each: first inflow was realized in the 3<sup>rd</sup> week of February 2014, and the second in the 1<sup>st</sup> week of March 2014. When the first tranche was received, the interbank market did not react, even after the data of SBP's FX reserves (inclusive of the first tranche) was made public on 27<sup>th</sup> February (**Figure 2**). This was because the source of this inflow was not known, and the market attributed the increase in FX reserves to bilateral and multilateral inflows, and higher-than-expected remittances. However, when the second tranche was received (during the week ending 7<sup>th</sup> March 2014), the market responded almost with a sense of panic, even before the FX reserves data was made public. 19 Newspaper reports dated 11th March 2014, that covered the grant were sufficient to radically change sentiments.

The Ministry of Finance released a press statement on 10<sup>th</sup> March, in which it disclosed the level of the country's FX reserves (inclusive of the second tranche), prior to the official release of SBP data. 20 However, the statement attributed the increase in FX reserves to bilateral and multilateral inflows, and claimed that US\$ 500 million more was to come (EFF tranche) before end-March 2014. Two days later, on 12th March 2014, the Finance Minister revealed the actual source: in a press conference, he acknowledged that it was the receipt of US\$ 1.5 billion from a 'friendly Muslim country', which pushed up the country's FX reserves. Following this, market rumors were substantiated by a Reuters story regarding the

■ Daily appreciation(+)/depreciation(-) of the PKR ◆ Change in SBP reserves during the week 2.5 Press statement by the Finance Minister on 10th Euro Bonds March, disclosing the level of FX reserves (inclusive

Figure 2: Daily Appreciation (+) / Depreciation (-) of the PKR



<sup>&</sup>lt;sup>18</sup> SBP releases end-week data on country's FX reserves on every subsequent Thursday.

<sup>&</sup>lt;sup>19</sup> SBP released data on FX reserves (inclusive of the second tranche) on 13<sup>th</sup> March 2014.

<sup>&</sup>lt;sup>20</sup> http://www.finance.gov.pk/releases\_mar\_14.html.

'total promise of US\$ 3 billion from Saudis' and the 'resumption of deferred oil facility' that Pakistan had back in 1998.<sup>21</sup>

In such volatile market conditions, if SBP had tried to target the PKR around FEER, BEER, or any other "equilibrium" level, it would have totally confused the FX market.

These developments created a sense of panic in the interbank – especially after some large exporters offloaded their FX holdings in bulk. The magnitude of FX selling was so significant that it surprised bank treasuries and even SBP. Eventually, SBP started purchasing hard currency from the FX market, to stabilize the market; the parity settled at PKR 98.10/\$ at the end of 12<sup>th</sup> March 2014. In such volatile market conditions, if SBP had tried to *bind* to the PKR around FEER, BEER, or any other 'equilibrium' level, it would have further confused the market. In our view, the FM's statement about 98/\$ and the unexpected grant, were sufficient to push the Dollar down. If SBP had not intervened aggressively, the PKR would have appreciated well below 98/\$.

• 98/\$ was a 'reflective' parity in Mar 2014: Though subjective, the PKR 98/\$ parity was perhaps reflective of the external sector conditions in March 2014. June 2013 provides a point of comparison, as market pressure on the PKR began in July 2013. By end-June 2013, the PKR was trading at 99.6/\$, which represented the following conditions in the country's BoP: SBP reserves were \$6 billion; debt payments of \$7 billion were due in the next 12 months; there was no IMF program; and no inflows from other IFIs in the pipeline. By the end of 7<sup>th</sup> March, SBP reserves had fallen to \$4.6 billion, but the overall external sector outlook was much more comfortable: debt obligations were reduced to \$5.5 billion; the IMF program was initiated; plans to issue Euro Bonds were finalized; and other IFIs had resumed their support to Pakistan. If 99.6/\$ was the 'reflective' parity at end-June 2013, the improved fundamentals afterwards could justify a parity somewhere around 97 – 99/\$ in mid-March 2014.

Bottom line: As things stand, the PKR is undervalued relative to the underlying FX market flows. There is artificial support to the US Dollars, as SBP has been building its FX reserves even before the beginning of the IMF program in September 2013.

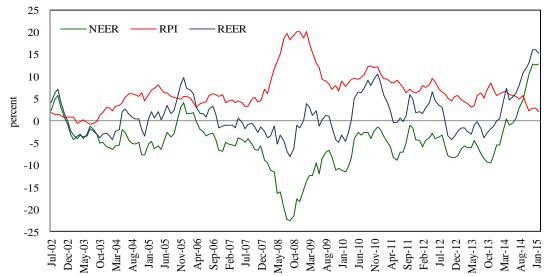
Having said, the PKR has appreciated in real terms, and is still trending up. Market forces that are also driven by sentiments, have been so volatile that targeting a desired PKR (FEER, BEER, DEER, PEER, etc.) would have been naïve, perhaps delusional. Managing market sentiments and *not* going against the market, is more important in the real world. In our view, the market's reaction to SBP interventions, is far more important than the 'competitive' price of the local currency.

This begs the question: does an appreciating REER represent loss of competitiveness? To answer this, we now have to go deeper into the causes of the appreciation in the past 12 months. It is also important to see how the PKR has fared against key global currencies.

<sup>&</sup>lt;sup>21</sup> http://www.reuters.com/article/2014/03/13/us-pakistan-saudi-idUSBREA2C13G20140313 and also see, http://tribune.com.pk/story/682409/reavealed-it-was-saudi-arabia-that-loaned-pakistan-1-5-billion-to-shore-up-reserves/

The Relative price Index (RPI) in Pakistan is not increasing as it was in the past decade. In fact, this stability in RPI itself has come from a stable PKR, which is instrumental in softening inflation expectations.

Figure 3: Year-on-Year Changes in REER and its Components



## V. What is driving REER appreciation?(Global Perspective)

As shown in **Figure 3**, there were several episodes of REER appreciation over the previous decade; none, however were driven by the NEER. In fact, the NEER has been falling during these episodes, but this was more than offset by increasing price differential (especially in FY08 and FY09). However, the recent episode of REER appreciation can be traced to an unprecedented increase in the NEER, as most hard currencies (like  $\in$ ,  $\pm$  and  $\pm$ ) plummeted

against the US Dollar as shown in **Figure 3**. The relative price differential is currently much lower than it has been in the previous decade.<sup>22</sup>

• The Dollar Rallies with News of the End of QE3: 2014 marks an era of the great divergence between the monetary policies of the US and the euro area/ Japan. While the Fed began to ease its asset purchase program during the year, the ECB and Bank of Japan started pumping huge amounts of money into their economies.

When the Fed announced the reduction in its monthly injections to \$75 billion in January 2014 (from \$85 billion per month since September 2012), this was perceived as a positive signal about the performance of the US economy. As the tapering schedule was strictly followed, confidence about the US economy strengthened.<sup>23</sup> This triggered an anticipation of an increase in the federal fund rates, which created a massive inflow of capital into the US. The US Dollar began to appreciate to reach an 11-year high against the basket of currencies

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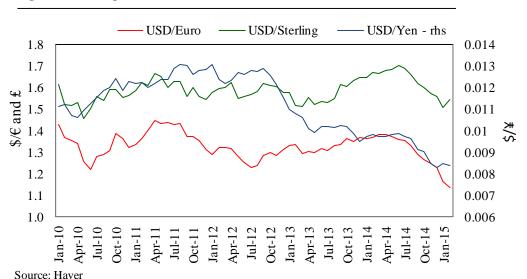
The recent REER appreciation can be traced to an unprecedented increase in the NEER; hard currencies like €, £ and ¥, have plummeted against the US\$.

<sup>&</sup>lt;sup>22</sup> In fact, this stability in the RPI itself has come from the stabilizing/strengthening PKR, which has been instrumental in softening inflation expectations.

<sup>&</sup>lt;sup>23</sup> The Quantitative Easing program (QE3) concluded in October 2014.

(**Figure 4**). Many emerging market currencies (specifically Brazil and Turkey) dropped sharply against the US Dollar.

Figure 4: US\$ Against Other Hard Currencies



• Euro Tumbles on Greek Crisis and the ECB's Asset Purchase Program: In contrast to the US Dollar, the Euro has been facing unprecedented challenges. On the one hand, the ECB began its asset purchase program to stimulate the Eurozone in 2014, and on the other, the crisis over Greek debt continues to worsen. There are increasing concerns over possible exclusion of Greece from the common currency system. The Euro is presently traded at a 12-year low against the US Dollar. This is significant for Pakistan, as the EU is Pakistan's major trading partner, with a combined weight of 44 percent in our NEER.

## VI. The Policy Response: Defy Market Forces and Devalue?

Some view the PKR appreciation against the Euro, as a major deterrent to Pakistan's export growth. Therefore, they suggest devaluing the PKR against the US Dollar, which would offset the impact of a stronger US Dollar against the Euro. We strongly dissent such a move. In our opinion, an intentional devaluation of the PKR against the US Dollar – at a time when our balance of payments is improving, will confuse the FX market. It is important to recall here that the PKR-US\$ parity is not just a currency conversion rate. This parity is the nominal anchor for people's expectations; about inflation; the future PKR parity; and business sentiments more broadly - not many care how the PKR fares vis-a-vis other hard currencies. Furthermore, the FX market is fixated on the PKR-US\$ parity; it understands that the PKR would appreciate, if SBP does not buy US Dollars. From SBP standpoint, managing market sentiments and ensuring stability in the FX market is much more crucial. Besides, the argument for a weaker PKR loses strength if we look at the outlook of global currencies, and Pakistan's trade patterns:

PKR/US\$ is the nominal anchor for people's expectations.. The FX market is only focused on the PKR/US\$ parity, irrespective of the global strength/weakness of the \$.

Euro may weaken further in months ahead, as a Greek default looms, while the Fed's monetary tightening will further strengthen the \$. Managing the PKR will be challenging, as global currencies realign themselves.

There is no credible evidence that PKR appreciation is responsible for Pakistan's stagnant exports; structural factors (energy; security; fiscal base) are more likely to be the main culprits.

- The external benchmark has become less important: What is currently happening with the Euro-Dollar parity, is extraordinary. The Euro has depreciated in real terms by 12 percent, and many analysts call the US Dollar rally a bubble. However, corrective action by the Fed is unlikely, as the anticipation of a hike in federal fund rates will attract massive capital inflows into the US, and further appreciate the US Dollar. In effect, the Euro's current weakness is actually discouraging the Fed from increasing rate. Euro may weaken further as the Greek default looms. In this global currency turmoil, where do we find a suitable 'equilibrium' level to tie the nominal PKR to?
- REER appreciation is not behind fall in exports: Between January 2014 and January 2015, the PKR appreciated by 27 percent against the Euro. However, Pakistan's exports to the EU increased by 9 percent YoY during this period, primarily because of the GSP plus status that Pakistan has. More importantly, since total EU imports have declined during this period, Pakistan's share in the EU market has increased.<sup>24</sup>

The decline in Pakistan's exports is coming mainly from two markets: China and the US. Pakistan's exports to China – the third largest export market after the US and EU, have fallen by 15 percent. But here, the problem is not the price; it's the China's cotton import policy. Over 60 percent of Pakistan's exports to China comprise of cotton and its products (yarn and fabric). In 2014, China's overall import of cotton products posted a sharp reduction of 26 percent over the previous year, as its government ended the cotton stockpiling program that was in place since 2011. Imports from Pakistan also fell; having said this, Pakistan's share in China's total cotton imports has increased.

In the US market, the problem is not Pakistan's competitiveness; but the lack of product diversification. While the US textile market is shifting towards synthetic products, we are still heavily focused on cotton textiles. In the year 2014, US imports of cotton products declined by 2 percent YoY, whereas its import of man-made fibre products increased by 7 percent.

**Bottom line:** The recent appreciation in REER is largely an outcome of an unusually strong US Dollar, and an unusually weak Euro. With global hard currencies in turmoil, the external benchmark for the PKR has become a bit meaningless. As far as the impact of this REER appreciation on Pakistan's exports, this assessment is vague. In our view, structural factors in Pakistan's economy are much more important.

<sup>&</sup>lt;sup>24</sup> It should be noted that it is not only the PKR that has appreciated against the Euro, other currencies – especially of our competitors – have also appreciated. For instance, since the beginning of this fiscal year, the Indian Rupee has appreciated by 24% against the Euro; the Chinese Yuan by 29%; and the Thai Baht by 28%.

<sup>&</sup>lt;sup>25</sup> For details, see SBP Third Quarterly Report for 2013-14.

<sup>&</sup>lt;sup>26</sup> Pakistan's share in China's total import of cotton has increased from 12.6 percent in 2013, to 13.3 percent in 2014.

### Conclusion

As things stand, meaningful export is more likely by fixing the supply side. For now, PKR's REER is probably the last thing to worry about. As of today, Pakistan's BoP position looks comfortable; oil prices are low; remittances are growing; IFIs support is in play; and SBP is building up its FX reserves. However, the trade deficit should be reduced. To achieve this, devaluation is neither necessary, nor sufficient. In our view, it is the supply line that needs to be overhauled. When Pakistan was given the GSP plus status; Pakistani firms could not gear up the production of exportable goods, but substituted away from the non-EU market.

Private sector should focus not only on generating a larger exportable surplus, but also increasing the range of products. Meanwhile, an industrial policy that clearly defines the country's strategic objectives, is a must. The government should focus on enhancing the country's resource base; attract private investments (both domestic and foreign); enhance productivity and efficiency; resolve energy shortages; and put into place effective supply chains. In short, sustainable export growth would come from fixing the supply side, not tinkering with the price of the Pakistan Rupee. In other words, with severe structural problems in the economy, getting the price "right" has little impact.