

# "Out of the Box"

Zafar Masud's Portfolio of Selected newspaper write-ups

February 2020

# Brief Profile | Zafar Masud 25+ Years of Experience



An international banker and entrepreneur, served at top positions at multinational banks in Pakistan and abroad. Extensive experience of working at the Board of Directors level including State Bank of Pakistan ("SBP"), Independent Monitory Policy Committee ("MPC"), Barclays Bank Southern Africa and National Bank of Pakistan ("NBP")

Currently, engaged as **CEO** (**Interim**) for **InfraZamin Pakistan** ("**IZP**") which will be the first of its kind credit enhancement for social infrastructure financing company in Pakistan being developed in alliance with international development financial institutions including **Private Infrastructure Development Group** ("**PIDG**"). Also engaged as a Consultant with **Karandaaz Pakistan** on **National Savings** digitization project and Senior Advisor with **Capital Resource** - a Corporate Finance and Advisory Services Company

Presently, serving as Member of Board of Directors and Chairman of the Board Technology and Digitization Committee of NBP, Member of Board of Directors and Chairman of the HR Committee of Port Qasim Authority ("PQA"), Member Advisory Council, Ministry of Maritime Affairs, Member of Board of Directors and Chairman of the Budget Committee of Gadoon Textile Mills Limited ("GTML"), Member of Board of Directors of Quaid-e-Azam Thermal Power (Pvt) Limited ("QATPL")

Most recently, until August 2018, worked as **Director General**, **National Savings**, **Ministry of Finance**. Initiated the digitization of the organization to include internal systems digitization and various digital channels for the customers, including **online banking and ATM Cards**. Finalized the structure for the launch of much needed **Shariah Compliant Product** and **Overseas Pakistanis Savings Certificates**. Successfully included **Persons with Disabilities** and **Shuhadah Families** through the welfare products

Formerly, Member of Board of Directors of SBP, served as the Member on the most prestigious and coveted constitutionally Independent MPC of the Government of Pakistan. Contribution on the SBP Board, with the Chairmanship of Publications Review and Membership of Human Resources and Investments Sub-Committees. Served as Member Board of Directors and Chairman of the HR Committee of Oil and Gas Development Company Limited ("OGDCL")

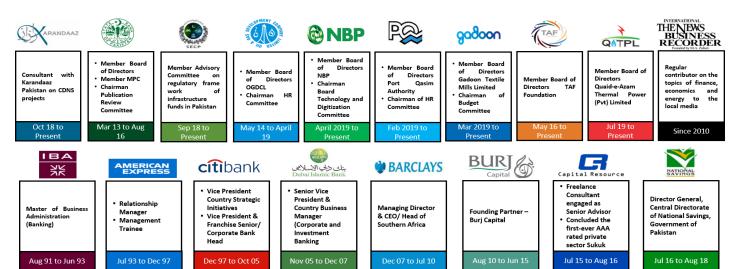
As **Founding Partner of Burj Capital** ("BC"), involved in fund raising and encouraging investment from the local and international markets with specific focus on **Sharia Compliant instruments to raise funding from the non-banking sources**. Also, involved in successful **corporate restructuring** 

Formally, as the Regional Managing Director & CEO for Southern Africa, Barclays Bank plc, responsible for three countries and represented on the Board of Directors, with managing total balance sheet size of US\$3Bn and around 10,000 people. Prior to Africa, was responsible for establishing one of the prime global Islamic banking franchises – Dubai Islamic Bank - in Pakistan, as Business Head for Corporate and Investment Banking. Before that worked for Citibank, as member of the Country Management Committee and responsible for handling Government and Public Sector business, involved in all the major deals done by Citibank between 1999-2005, including US \$600Mn Government of Pakistan Inaugural Islamic Sukuk, US \$350Mn PIA-Exim Bank Deal, First-ever Derivative/ Interest Rate Swap with PARCO, Set-up first-ever US \$100Mn OPIC guaranteed/ financing facility for Pakistan, etc. Started the career with American Express Bank Pakistan as Management Trainee

#### Part of PICG's list of Independent Directors

**Regular contributor** on the topics of finance, economics and energy **to the local media.** A collection of selected newspaper write-ups is in the process of being published as a booklet by the name of "Out of the Box"

#### Website: zafarmasud.com



# **Table of Contents**

Bri	ef Profile  Zafar Masud 25+ Years of Experience2
1.	Exchange Parity: "The Pugio"4
2.	Stockholm Syndrome9
3.	Pakistan's Biggest Crisis: "Human Resource"11
4.	Managing External Account – Monetary Policy (1st of the series of 3) 14
5.	Managing External Account - Fiscal Policy (2 <sup>nd</sup> of the series of 3)17
6.	Managing External Account - Structural Changes ( $3^{rd}$ of the series of $3$ )20
<b>7</b> ·	Devaluation, Interest Rates and Empress Market23
8.	Worker Remittances: "Deserves Industry Status"25
9.	Fiscal Deficit Management - The "Big Five" Theory29
10.	FX Reserves Accumulation - Glass Half Full32
11.	Pakistan Risk - Myth and Reality34
12.	National Savings: The Cat is in the Bag38
13.	Plow Savings - Creating Safety Net and Financial Inclusion45
14.	Cyber Crime: Role of Regulators and Government Institutions47
15.	Oil Price Prognosis - Global Politics and Economics51
16.	Brexit Implications and Impact on Pakistan Economy 55
17.	Local Natural Gas - Immediate Solution to Power Crisis60
18.	Pakistan Power Sector Agenda: Issues and Solutions of T&D Sub-Sector62







# 1. Exchange Parity: "The Pugio"

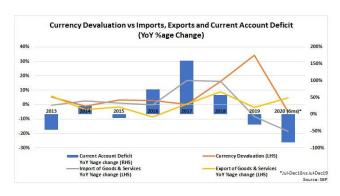
# The News International, 3<sup>rd</sup> February 2020

There has been a considerable debate on currency management for a while. The pendulum of currency swung between defending currency to supposedly market based exchange rate in the recent times. The side-effects of both extremes are much clearer in hindsight and this may perhaps be a good time to look at their pros and cons objectively.

The best analogy for monetary tools, particularly exchange parity, to be used for correcting the external account imbalances is that of the pugio - a dragger of the sorts used by Roman soldiers as a sidearm. It seems likely that the pugio was intended as an "auxiliary weapon", but it's exact purpose to the soldier remain unknown. Whether it falls in the family of a sword or a dragger is yet to be concluded; it could be used either way depending upon the situation and it could, of course, back-fire, if incorrectly drawn on.

One thing is becoming apparent about exchange rate management that "actions taken in isolation" at either end of the stick may perhaps be more harmful than help, in the medium to long run, as our challenges in current account are more structural in nature, than merely monetary policy, particularly currency, driven. While current account deficit was cut by ~US\$6bn between 2018 and 2019 when there was massive devaluation; however, it's yet to be concluded on how much

is the contribution of devaluation therein - exports remained virtually flat while single largest fall in imports was in machinery in which major contribution may perhaps came from the slow-down in CPEC. Same is the phenomenon in the last six months (July-December 2019) where the current account deficit dropped down commendably from US\$4.3bn (in same period last year) to US\$0.7bn, but the exports remained struggling with merely a growth of ~4% or



US\$529mn (with 75% of this growth came from rice and vegetables); however, on the other hand imports tumbled by ~US\$6bn mainly on account of ~US\$3bn oil imports (basically, price driven which reduced by almost 11.5%), ~US\$1bn in vehicles/ kits (fiscal measures propelled perhaps), ~US\$0.8bn machinery which means compromising on sustainable GDP growth numbers for the future. This is very visible from the graph here that while there maybe a correlation between the currency movement and the trade numbers; however, the relationship between them is weak, as was concluded earlier in the same space. It appears that the devaluation doesn't feature in as a prominent factor in achieving reduction in current account deficit or it was perhaps not necessary to devalue the currency that much to achieve the desired objectives on current account front, as it had more negative corollary, including fueling extensive inflation and economic growth compromises, while bearing very limited benefits and that also for short-term, if all other reforms are not pursued in tandem.

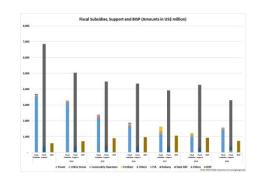
Structural reforms, therefore, remain center of the plate in addressing primary or secondary deficits - the twin deficits. Devaluation, or for that matter defending currency, are adhoc measures at best, which could provide a temporary respite

and there would be no escaping from painful structural reforms (including import substitution, value addition and widening of products in exports, etc.) which will only start showing the benefits from medium to long term. In the meantime, until the aggressive structural measures are embedded, the choice has to be made on how to manage the currency. While the jury is out on this; however, it could be argued, looking at the way things have emerged over the past few years, that defending currency may be a better option, than devaluation or market based exchange rate, as a stand-alone monetary tool, contrary to the general text book belief, with budget deficit to be funded from FX debt in the interim. The myth that "debt is bad" is not true after all, if it's deployed for the right purpose.

With recent developments, this has surely driven home that currency movement impacts the lives of masses as much, if not more, as any other element like prices of power, commodities, utilities, etc., as currency remains a major factor in influencing inflation. Governments all over the globe provide subsidies to various essential items which impact lives of masses on a daily basis even in the developed world. Therefore, in order to appreciate the exchange parity levels, we need to consider currency as yet "another commodity" like electricity, fertilizer, wheat, etc., which impacts the livelihood of masses, given that almost 3/4<sup>th</sup> of our imports are essential or semi-essential in nature, and most contentious point here is that defending currency shall be treated as subsidy like any other commodity. However, this is important to contextualize qualitative and quantitative impacts of this subsidy, ie., cost of defending currency.

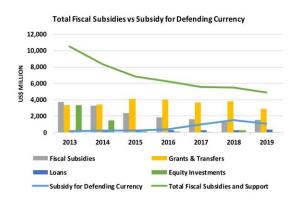
In orders to assess the impact of defending currency, certain assumptions have been employed herein. The context of defending currency shall be well understood and appreciated. The financial cost of it shall also be realistic and not based on unrealistic assumptions or hear-say or half-baked information. The key and the core assumption is that in an ideal situation, the currency level shall be maintained as such that the current account becomes balanced, which means that devaluation would boost exports and discourage imports at the same time; thus, result in gradual reduction in current account deficit (or even better in our context surplus in transition) and eventually lead to a balanced current account. While I believe that surplus is better until the entire foreign currency debt of the country is paid down but some economists argue that current account surplus means excessive capital generation which maybe an inefficient external account management. Therefore, it's safe to assume, for the purposes of this write-up, that balanced current account is the perfect situation for the time being and the FX debt is reduced gradually over a period of time with "real" stability and sustainable surplus like situation in external account and not through "temporary" stability at the back of currency devaluation. In the interim, budget deficit is the amount that would be funded through FX debt and the cost of debt, in turn, will be the cost of defending currency. To calculate the cost of debt, rate of 7.5% p.a. has been assumed based on the estimated cost of raising debt through Eurobonds/ Sukuk. Since the concept of defending currency institutionalized since 2013 onwards; therefore, the timeline of data taken into account is from 2013 in this article.

Year	Current Account Deficit ("CAD")	Gross Domestic Product**	CAD as %age of GDP	Change in External Debt	Cost of Defending Currency	Cost of Defending Currency as %age of GDP	Fiscal Subsidies and Support**	Fiscal Subsidies and Support as %age of GDP
Amounts	in US\$							
2013	-2,496	224,868	1.11%	-4,579	187	0.08%	10,553	4.69%
2014	-3,130	255,055	1.23%	4,369	235	0.09%	8,317	3.26%
2015	-2,795	269,445	1.04%	-98	210	0.08%	6,873	2.55%
2016	-4,867	277,625	1.75%	8,774	365	0.13%	6,229	2.24%
2017	-12,621	304,428	4.15%	9,533	947	0.31%	5,536	1.82%
2018	-19,897	284,613	6.99%	11,760	1,492	0.52%	5,488	1.93%
2019	-13,830	236,206	5.86%	11,111	1,037	0.44%	4,865	2.06%
Sub-total					4,473		47,862	

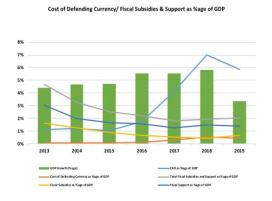


The outcome of this exercise is very revealing. It appears that between fiscal years 2013 and 2019, the total cost of

defending the currency was ~US\$4.5bn whilst the accumulated fiscal subsidies to power sector, food & commodities, fertilizer, etc., and cash support to State Owned Entities ("SOEs") was ~US\$48bn. The cost of BISP, or Ehsas Program, on top of that, in the same period, has also been in the vicinity of US\$6bn. The purpose of all these forms of subsidies is to maintain stability in prices and keep inflation under check or improve affordability of essentials for common person. The most disappointing element is the US\$30bn subsidies and cash support to SOEs which is a total waste of money



as this cash support could be saved with better corporate governance and eliminating political influence in these organizations as were achieved in the case of banking reforms in late 1990s and early 2000s. The most interesting aspect is that if these cash supports/ subsidies are saved then the need to defend currency will also subside as all these are intertwined one way or the other. However, given the choice, decision is very simple - save these leakages and use these resources instead to defend currency as fixing these issues, with better governance or privatization, is easier than trying and managing temporary respite through devaluing currency. Therefore, in pure monetary terms, it's very clear that



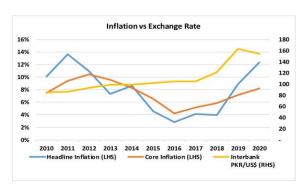
subsidizing or in other words cost of defending currency is much lower than direct subsidies that the Government extends to achieve price stability for the masses.

Another very interesting aspect is that while current account deficit has been cut down substantially in absolute terms; however, in percentage of GDP terms, successes are not as pronounced and in fact the cost of defending currency is even lesser in relative terms. This obviously is due to the lower denominator - GDP - which has tanked since the currency

had been made market based. Tried and tested, proven formula across the globe for bringing people out of poverty is the growth in GDP which is substantially compromised when the currency is not defended. Therefore, making currency market based is double whammy as it not only stoke inflation but also adversely impact GDP growth which means less job creation and affordability of utilities and basic necessities for the peoples. Pakistanis seem to be suffering from this double trouble at this stage and this must be corrected in the best interest of the peoples.

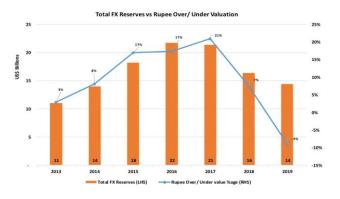
Devaluation also directly results in contributing to the fiscal deficit as the cost of debt servicing on FX debt increases

which results in higher borrowing in PKR to cough-up more foreign currency as Pakistan is in a debt trap. This also causes cost-push inflation as deficit financing is the sore cause of creating inflation in any economy. This tantamount to effectively printing currency and results in higher currency in circulation which has increased over three folds and growing in the last few years. Thus, fueling inflation and hurting common people on this count too, other than making essential and semi-essential items expense due to



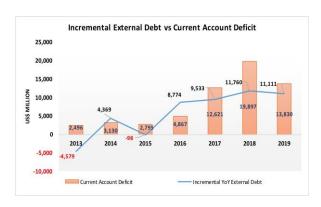
devaluation. This is the second argument why the currency need to be defended until we're carrying FX debt as a country.

The Real Effective Exchange Rate ("REER") index (the optimal level of currency vis-a-vis competition) is also available since 2013. What we have done is that we have calculated the optimal exchange rate based on the REER index and then compared it with the interbank rates to assess the over or under valuation of the currency in the table below.



Date	Interbank Rate based on REER*	Interbank	Rupee Over/ Under value %age	Total FX Reserves	FX Reserves with the Banks	FX Reserves with SBP
			Amounts in US\$ million			
2013	<b>102.53</b>	99.55	3%	11,020	5,011	6,008
2014	<b>106.68</b>	98.68	8%	13,990	4,957	9,033
2015	<b>119.18</b>	<b>4</b> 101.85	17%	18,202	5,113	13,088
2016	<b>122.89</b>	<b>4</b> 104.73	17%	21,766	4,946	16,820
2017	<b>126.89</b>	₩ 104.86	21%	21,403	5,258	16,145
2018	<b>130.74</b>	<b>4</b> 121.63	7%	16,407	6,618	9,789
2019	<b>4</b> 148.52	<b>163.24</b>	-9%	14,443	7,170	7,273
Jul 19	<b>9</b> 143.50	<b>159.90</b>	-10%	15,062	7,295	7,767
Aug 19	<b>9</b> 145.52	<b>157.01</b>	-7%	15,644	7,365	8,280
Sep 19	<b>4</b> 147.66	<b>1</b> 156.48	-6%	15,004	7,262	7,742
Oct 19	<b>4</b> 147.81	<b>155.90</b>	-5%	15,090	7,175	7,914
Nov 19	<b>9</b> 148.94	<b>155.44</b>	-4%	15,993	6,880	9,113
*Base 2	010 = 100					Source: SBP

We have also compared currency points with the level of reserves in each year under assessment. The results are very interesting here as well. It seems that reserve levels are highest when the currency was defended. There's a popular view that these reserves are built based on incremental FX debt. We have looked at this aspect too and would like to refer to the graph below. It's very clear that there has been very good debt management on the external front. Except

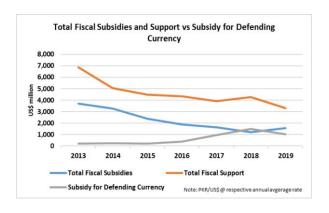


for 2016, when foreign currency borrowing outpaced the current account deficit. However, when looked at the full timeline under discussion, it seems that FX debt has been well managed as there has been an accumulated incremental FX debt of ~US\$41bn verses total current account deficit of ~US\$60bn - a favorable delta of ~US\$19bn - and the only plausible explanation for funding this delta is through professional markets by SBP which also generally believed as cost of defending currency which is not correct. This can also be said here that the correlation of both currency and

reserves appear to be weak. This also defeats the fashionable notion that the reserves were built through debt accumulation only when the currency is defended. In fact, it's totally in contrast to this notion whereby the deficit was funded through other sources than FX debt. Arguably, this also causes inflation as the Government or the Central Bank has to acquire foreign currency from the open market at expensive rate but this cost is still worthwhile than the cost of devaluation as we have seen above.

In conclusion, there shall not be any argument that the ideal situation is to have the market based exchange rate. The question is when and how? This write-up argues that it shall not be done in "isolation" - ie., the aggressive structural reforms has to be done in tandem with currency management which has to be done gradually with adequate intervals, if it has to be devalued at all, to avoid disruption in the market and ensuring that these measures are well absorbed by

the market and keeping the prices/ inflation undercontrol for general masses. The other argument here is perhaps that until the benefits of reforms are well embedded, it maybe a good idea to defend the currency as much a possible and this write-up argues that it's surely worth while to defend the currency within reasonable limits. Devaluation in isolation, and independently, provides temporary stability only. The situation goes back to square-one in due course, if the necessary institutional initiatives are not done simultaneously, and the losses it causes in the



market, in the meantime, becomes unrecoverable perhaps. Therefore, the focus shall be on reducing fiscal deficit caused by cash support to SOEs and subsidies to the inefficient sectors like power (leakages to be plugged) with better corporate governance and aggressive institutional reforms, rising over and above politics and political considerations. Rest of the aspects will fall in-place by default, including external account challenges to a very large extent, and then the monetary policy (both interest rates and currency management) will become more effective and useful.

# 2. Stockholm Syndrome

# The News International, 26th January 2020

Let's first begin to understand what's Stockholm Syndrome. "It's a psychological response wherein a captive begins to identify closely with his or her captors, as well as with their agenda and demands". The name of the syndrome is derived from a botched bank robbery in Stockholm, Sweden. In August 1973 four employees of Sveriges Kreditbank were held hostage in the bank's vault for six days. During the standoff, a seemingly incongruous bond developed between captive and captor. One hostage, during a telephone call with Swedish Prime Minister Olof Palme, stated that she fully trusted her captors but feared that she would die in a police assault on the building.

Pakistan seems to be suffering from the same syndrome. The obsession and the unwavering trust in multilateral agencies, including IMF, and the traditional foreign bilateral partners, particularly Saudi Arabia in the context of helicopter money, and the bells & whistles attached with the helping-hand ever extended by them in the past, fits the bill perfectly to categorize the situation, as such, in the context.

There're broadly two fundamental issues with these "physiological alliances" with our "hijackers" - firstly, they follow their own template to address our economic challenges whilst our issues are very unique (like a typical emerging market country) and it doesn't necessarily fit into the stereotype constituencies set by these agencies for the other countries, albeit emerging ones. The fact is that they could only provide a plan and attach certain terms and conditions with it for pouring in the committed support in bits and pieces, which may or may not be in the best interest of the Country and it's peoples.

The second most important aspect is that the foreign policy of Pakistan shall be in sink with the economic agenda. This also seem to be a victim of "Stockholm Syndrome". It's like old wine in new bottle. The result is that we've become "in love" with our captors as that provides us a temporary respite for our circular economic problems which keep on cropping up every now and then. These breathers invariably comes with conditions which at times are unreasonable and not necessarily in our favor but we tend to accept them due to our physiological break down that the problem of all our ills are offered by our traditional captors.

These psychosomatic shackles of Stockholm Syndrome need to be broken. The sooner we get ourselves free the better it is for our sovereignty and national interest. The challenging bit, however, is that there're no, or at best very limited, short-term options available to address our economic foes. The fact is that for the implementation of reforms even immediate term is three years or beyond. The public expectation management in this respect is crucial. The economic and political managers must inform masses that only medium-term solutions will bear sustainable development results.

Unfortunately, most of our economic actions are driven by external account exigencies. In the immediate future, the only promising element is harnessing of Worker Remittances through Banking Channel. In the medium term, import substitution (local E&P exploration, mining, basic engineering, etc.) and structural changes in exports (promoting value-addition) are the only promising options. All Government actions shall move in this direction to achieve the desired results even in medium-term to long-term. The key, therefore, is that we need to develop our own indigenous economic revival and management plan. We can't continue to be banking on our "captors" for the solutions of our freedom.

Most importantly, the onus of execution of the plan rests with us and our economic and political managers only. This has been our biggest deficit which leaves us vulnerable to arm-twisting by our captors. This is what our history says and this what will continue to happened in the future too until and unless we have our own indigenous plan in-place with full commitment and buy-in from all stakeholders - Government, Opposition, Establishment, etc. In other words, we need a much needed "charter of economy and reforms"; otherwise, in the absence of that we would continue to wonder around and remain hostage to "Stockholm Syndrome".

# 3. Pakistan's Biggest Crisis: "Human Resource"

#### The News International, 8th June 2019

Pakistan is facing a bizarre conundrum. On one hand, it's the 5th most populated country in the world with over 210 million souls; on the other, it's facing serious headwinds in finding good quality people, particularly in the public sector. This is a classic case of quantity verses quality which gives birth to various socio-economic problems, including unemployment (thus, law and order), shrinking of professional & trained work-force, etc. The situation becomes more complicated when we look at the population demographics of Pakistan: 43% of the population under the age of 15 years (and 16 to 64 years of age: 53%) with a questionable figures of official literacy rates of 58% and unemployment rate of ~6%, leaves Pakistan still with big numbers of educated people without jobs. Whilst sociological challenges of these facts deserve a full discussion and thesis; however, this write-up is confined to cover this dilemma in the context of human resource availability for public sector in Pakistan.

Several surveys and studies have been conducted to find the most educated countries. The Organization for Economic Cooperation and Development, or OECD, has made a list of world's most educated countries based on the number of adult residents between the ages of 25 and 64 that have received a two-year or four-year degree or have received an education through a vocational program. Based on this information, Canada is the most educated, where over 56% of adults meet the criteria used by the OECD. Coming in as the second most educated nation is Japan with over 50% of the adult educated population. In third place with 49.9% of its adult population considered educated is Israel. The number of educated individuals in Pakistan, based on the criteria defined by OECD, will be most depressing and probably rate it at the lowest ebb. Good professionals in Pakistan remains a rarity, fundamentally due to quality of education supplemented by substantial brain-drain over the years owing to lack of enough attractive opportunities within the country and/ or limited exposure and grooming circumstances for local professionals. Whatever the case maybe but the situation stays grim on the valuable professionals front.

One thing is for sure that there has been an across the board sectorial decay in the society, and education has not been spared either, resulted in compromise over the available professionals, both in public as well as private sectors. This situation is, however, totally precipitated in the public sector which was further aggravated due to faulty compensation and invisible merit-oriented culture and performance management system. Furthermore, current environment in the Government is keeping the professionals away and the good quality civil servants are most reluctant to take decisions in the day-to-day workings, let alone bold ones required for some principle changes.

As one has been stating in the past that any measure on monetary and fiscal policy fronts will have limited impact until they're complimented by structural reforms pursued simultaneously with them on a war-footing basis. Pakistan is presently standing on the cross-roads where there's no other way out to address peoples economic miseries, and brought them out of the poverty line, but to religiously undertaking structural changes which means taking difficult, or rather courageous, decisions remaining, of course, within the confines of law and ethics (something which is indeed a given). Out-of-the-box and aggressive decision-making are the prerequisites to achieve structural changes which, unfortunately, have limited allowance under the current public sector environment. While lack of available human capacity is an issue across the board; however, the prevailing system needs a shake-down, and in fact may require to be

erased, and start afresh, in some cases. This also leads to a big deficiency on the ownership of affairs and problem-solving approach within the public sector officers and professionals which has become more pronounced of late.

The World Bank's most relevant index, in this context, is "Government Effectiveness" which captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. The rating scale ranges between -2.5 weakest and 2.5 strongest. The global average for 2017 was -0.02 points. The highest value was in Singapore: 2.21 points and the lowest value was in Somalia: -2.21 points. Pakistan was ranked at 129th out of the total of 194 countries with embarrassing -0.58 points.

This makes it very obvious that the availability of quality personnel is the key issue and is a real crisis that the Government is confronted with at present and this shall be addressed ahead of anything else to improve the Government's effectiveness, delivery for the masses and to undertake the much needed structural reforms, to ultimately help lift masses out of the poverty line. While this is an extremely complex and sensitive matter to be taken care of but working on a couple of angles could immediately help address this "elephant in the room". One being, and perhaps most importantly, "indemnifying the decision-makers" against genuine professional/ business judgement calls. There must be a process in-place whereby accusation against any public servant shall either be cleared by the related regulator (in the case of regulated body corporates) and/ or the highest authority within the Government. To assist them, the Government may consider setting-up a commission of serving high-court and/ or supreme-court judges which will evaluate each request received from law enforcement agency for investigation against any civil servant for misconduct. This will create some sort of buffer (mitigate harassment) and inspire confidence against the public servants to make legitimate aggressive decisions in the best interest of the nation. In addition to this, exclusive courts, like banking courts, maybe introduced which would immediately be available to public servants for hearing their plea, if they're charged for wrongdoing, and to dispense justice on priority. There may also be a negative accountability element to be introduced whereby at the end if it is proven that the indictment was frivolous then the individuals involved in false allegations and investigation shall be taken to task. These amendments are required in law and maybe given legal cover through an act of parliament.

Apart from bureaucratic process, hiring through a process of advertisement, etc., attracting professionals from the market is a challenge for the Government due to lack of cover to them vis a vis genuine business decisions and facing possible intimidation. The good professionals are always solicited and pursued; they're generally reluctant to applying for jobs. The Government has to do necessary enactment through the federal cabinet (or maybe through the parliament) to ensure employing top-notch professionals from the market on commercial terms. The legal cover, in this context, is necessitated to avoid any uncalled for litigation in the courts which, unfortunately, comes concurrently with the insecurity that the induction of professionals breed, with the implied mandate to undertake the required structural changes, amongst various groups in the organizations with vested interests.

For the existing career civil servants, the introduction of bell-curve at all levels on a stand-alone basis and overall for each division/ organization must be made mandatory. Currently, this concept is non-existent and in fact the existing system is misused to the extent that perhaps 90% of the officers are rated above par while only those are rated at par or below who're being penalized on account of personal vendetta and settling scores, etc. Whatever the statistics and

reasons maybe but the situation is dismal in terms of award of ratings within civil service and this is the core problem to ensure delivery and Government effectiveness. The bell-curve discipline will ensure that performers and non-performers are clearly identified and rewarded or penalized, as the case maybe. Coupled with rightly planned compensation packages (as existing packages are misunderstood and miscalculated), bell-curve approach will surely ensure better performance and meritocracy within the Government set-up which is totally missing at this stage - as horses and donkeys are treated the same way. The training and retraining of the public servants within the country and outside shall be made more robust with the assistance and support from international donor and multilateral agencies, particularly in specialized areas/ jobs. This most critical area has currently been taken flippantly in the Government and remains a core predicament.

The above proposed reforms are the possible immediate fixes and are in no way an exhaustive list. In fact, it's merely a starting-point for a long and windy road, whereby these changes will be fully embedded with the merit-oriented culture within public sector. Having said that embarking on these steps will ensure prompt improvement in delivery and successful execution of reform agenda of the Government which is becoming increasing inevitable. The economic crisis or any other crisis that has been debated in the country are shackled due to Human Resource related issues which remains the "Biggest Crisis in Pakistan".

# 4. Managing External Account – Monetary Policy (1st of the series of 3) Business Recorder, 25th September 2018

The Monetary Policy is the key to influence trade/ current account of any country. The extent and the effectiveness of that, however, varies from country to country, given country's own political and economic dynamics and other realities on the ground. These elements must not be used as "one-size, fit-all" as part of the template to manage the economy, particularly the external account. The effectiveness of monetary policy is already under debate these days, particularly in Europe, due to substantial accumulation of price insensitive global sovereign debt over decades, making monetary policy tools less potent.

To evaluate the impact of these instruments on Pakistan, we have tried to plot the trade data for the last 20-years (since 1999) and compared it with interest rates and exchange rates during this period to figure-out the correlation between these elements. The result of this exercise will help the policy-makers to appreciate which instrument to play when and to what extent to achieve the objective of managing trade and current account. For the purpose, correlation coefficient amongst various variables was calculated.

The outcome of this drill has been absolutely fascinating as it has predominantly been off the conventional economic principles in a perfect environment or in more developed economies. Furthermore, the change in the relationship of various factors under assessment over different timeframes have also been very interesting, particularly the last 10-year period which has been a true outlier, probably due to political reasons.

# Virtually Non Weak Moderate Strong Exchange Rate & Imports Exchange Rate & Exports Interest Rate & Imports Interest Rate & Exchange Rate Interest Rate & Trade Deficit Exchange Rate & Trade Deficit

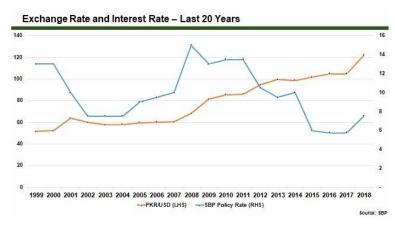
However, the most authentic of the chronologies seem to be the two decades one, as it has appropriately covered different sorts of events in different time periods. Hence, the requirement for necessary shift in the thinking and the strategy of policy-makers to manage the much-needed present current account deficit at hand.

#### Correlation Coefficient - Varied Timelines

Variables	Correlation Coffecient	Relationship	Correlation Coffecient	Relationship	Correlation Coffedent	Relationship	Correlation Coffecient	Relationship	
		Last 20 Years		Last 15 Years		Last 10 Years		Last 5 Years	
Exchange Rate & Imports	0.94	No	0.93	No	0.95	No	0.91	No	
Exchange Rate & Exports	0.88	Strong	0.84	Strong	0.44	Moderate	0.18	Weak	
Interest Rate & Imports	-0.20	Weak	-0.23	Weak	-0.73	Moderate to Strong	-0.02	No	
Interest Rates & Exports	-0.10	Weak	0.01	No	-0.22	Weak	0.78	Moderate to Strong	
Interest Rate and Exchange Rate	-0.34	Weak to Moderate	-0.37	Weak to Moderate	-0.80	Strong	-0.11	Weak	
Interest Rate and Trade Deficit	-0.26	Weak	-0.34	Weak to Moderate	-0.74	Strong	-0.20	Weak	
Exchange Rate and Trade Deficit	0.91	No	0.88	No	0.91	No	0.87	No	
Interest Rates and Current Account	-0.18	Weak	-0.17	Weak	0.14	No	-0.03	No	
Exchange Rates and Current Account	-0.43	Weak to Moderate	-0.27	Weak	-0.37	Weak to Moderate	-0.85	Strong	

At the outset, one must highlight that neither interest rates only or exchange rate in isolation nor they both put together can address the acute challenge of the prevailing current account deficit. A very large grey-economy and the substantial funding needs of the Government being met from the market (and becoming a dominant borrower), renders monetary policy actions compromised and help in managing the

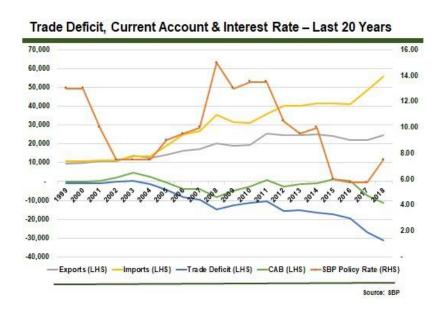
situation to an extent only. There's an obvious need for strong support of supplementary measures on the fiscal front to stretch the shelf-life of monetary policy tools and finally need the most difficult structural changes to address the issues on a sustainable basis. All these factors, monetary policy, fiscal policy and structural adjustments must move in tandem (or at least in a strategic, synchronized fashion) to get the full benefit of these available instruments; any



of them run independently will have compromised results. Most importantly, the degree of difficult decisions escalate from the first phase of using monetary policy elements to the eventual implementation of structural reforms. Thus, high-level resolution/ commitment on the part of the political actors/ Government becoming a prerequisite to take the maximum advantage of these available constituencies to manage the economy, particularly the external account in the short to medium run.

Let's first look at the relationship strength between interest rate and currency in the context of Pakistan. The convention says that the relationship between these two factors shall be strong and inversely related - i.e., interest rates go up, currency stabilizes or move inversely, and vice versa. However, in the context of Pakistan economy, the direct relationship between the two has been weak to moderate, which means that to play with interest rate to manage the currency is at best moderate

but it could be safely assumed as weak looking at the relationship between the other elements of current account. While jostling with the decision on the interest rate adjustment with the perspective of managing the current

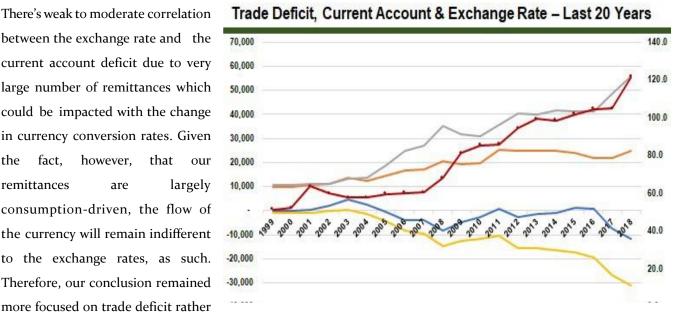


account deficit, the policy-makers must keep this fact in mind. The elasticity between interest rate and trade/ current account deficit is weak; in fact, the relationship with import and export individually have also been Therefore, this can be safely assumed that interest rate adjustments have minimal impact on swaying the current account deficit. Having said that, this must also be kept in mind, however, that the movement of policy rate remains a strong indicator and message for the market on where the

policy-makers see the economy going, but using it as a tool to manage the trade/ current account deficit remains feeble.

Now, let's turn to the influence of exchange rate to manage the trade deficit. Whilst the relationship between exchange rate and exports is "strong". However, given the fact that we have wide trade deficit and there clearly seems to be "no relationship" between the exchange rate and the imports; therefore, there's hardly any effect of exchange rate to manage the overall trade deficit.

There's weak to moderate correlation between the exchange rate and the current account deficit due to very large number of remittances which could be impacted with the change in currency conversion rates. Given the fact, however, that our remittances are largely consumption-driven, the flow of the currency will remain indifferent to the exchange rates, as such. Therefore, our conclusion remained



than current account, in this case. The point here's that we must use the currency adjustment with extreme care, given its influence on managing our trade deficit. It seems that with stubborn imports (essential items, high-end consumer products, etc.)

and narrow, low value-added exports, at times the exchange rate movement does more harm than help. However, like interest rates, currency adjustment remains a strong messaging instrument for the market on the state of the economy.

To conclude, the 20-year data proves that the exchange rate has "virtually no impact" and the interest rate has "at best a weak influence" to manage the trade and the current account deficit in Pakistan. Therefore, the decision-makers shall make a decision to adjust these two key monetary policy tools with extreme caution to manage the pace of the economy and the management of FX reserves through trade. This is also resolved that in orders to manage the imports, the best instrument available is the fiscal policy (duties, cash margins, bans all together, etc.) at this stage, while simultaneously working on the import substitution, a medium to a long-term fix. On the other hand, the sustainable growth in exportable flows could only be achieved through a medium to long term solutions with structural changes (value-addition, non-conventional exports, etc.) and exploring new paths, like manpower exports - an area gravely neglected - which must be given the status of an industry and measures must be taken and offer incentives, accordingly. We're sort of left with medium to long term solutions, other than the aggressive fiscal measures, while all other actions, particularly the monetary policy ones, are a temporary respite and may act as a ventilator for the economy and may not be beneficial in the long haul.

# 5. Managing External Account - Fiscal Policy (2<sup>nd</sup> of the series of 3) Business Recorder, 10<sup>th</sup> October 2018

Further to my earlier article "Managing the External Account - Monetary Policy", this is the second article of the three-part series of my articles on managing external account.

On the first article, I got a very sound and constructive feedback from a very close economist friend, who I consider as one of the best economists in the Country. He had pointed out that "conditional and unconditional correlations by no means imply a causal relationship", which means that if causal relationship

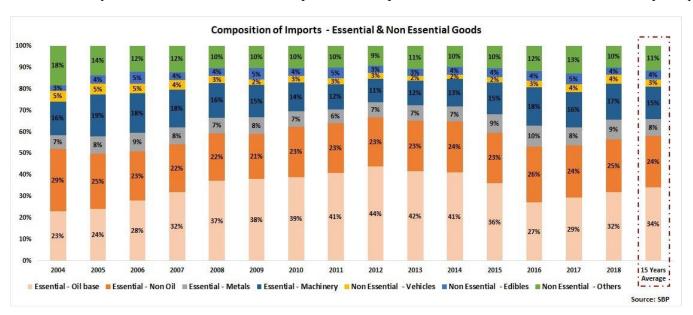
#### **Correlation Coefficient - Varied Timelines**

Variables	Correlation Coffecient	Relationship	Correlation Coffecient	Relationship	Correlation Coffecient	Relationship
	Last 15 Years		Last 10 Years		Last 5 Years	
REER and Imports	0.71	No	0.64	No	-0.28	Low
REER and Exports	0.52	Moderate	0.14	Weak	-0.87	No
REER and Trade Deficit	0.74	No	0.66	No	-0.04	No
Real Effective Exchange Rates ("REER")						Source: SBP

between exchange rate and trade deficit is considered then the results changes and leads to positive correlation between the two. While with different sets of data, the conclusion is very different then the one

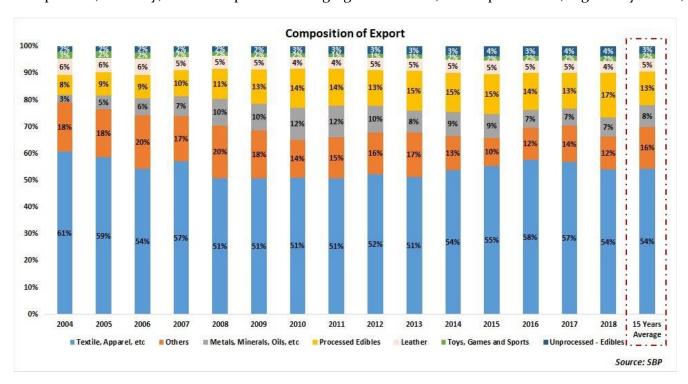


I had drawn earlier; however, looking more into it, I had realized that perhaps my conclusion, based on more practical aspects then the conclusion drawn in a perfect environment, is probably more real. Unfortunately, we, in Pakistan, neither operate in a perfect environment nor have an adequately



documented economy. Therefore, we must accept the economic theories with a pinch of salt and put our own "open environment" conclusion to it. As I said in my earlier article, with a very large greyeconomy coupled with almost 81% (last 15 years average) of the imports being essential and low value-added & narrow export base, there will be a very limited influence of exchange rate on the trade deficit. Furthermore, even if one would accept the economist argument that imports are elastic to real exchange rate then one must appreciate that it's at the expense of economic growth which is the cornerstone of achieving maximum, if not full, employment goal - the primary economic objective for any Government for its people. Pakistan being far-away from this situation, require at least a double-digit growth for a consistent period of decades, like India and China, to achieve the ultimate objective on the employment front.

Having said that, let's now look at the possible impact of fiscal policies in managing the external account. Before, we proceed further, I must highlight that the impact of fiscal policy is always better than monetary policy in managing external account in an environment like the one prevailing in Pakistan. However, fiscal policy tools have also been exhausted to a very large extent and now these tools could further be stretched to an extent only, and then we will have to move into the realm of structural changes to complete the loop to address the growing trade deficit. The most interesting revelation is that Pakistan is stuck in a trap of essential imports from the economic growth standpoint, with oil-based imports being 1/3rd of total imports and non-oil based and machinery & metals being 24% and 23%, respectively. Any further management of import bill through exchange rate would risk essential imports (particularly, machinery) to suffer; otherwise, significant impact on import controls would not appear. Therefore, selectively discouraging targeted imports will be the only way out to keep the balance between growth rates/ employment generation and preserving perhaps the most precious commodity in Pakistan (i.e., the foreign exchange reserves). This objective could most effectively be achieved through the smart fiscal policies, whereby, various import discouraging instruments, like import duties, regulatory duties,



cash margins, etc., could be instituted or further enhanced on the non-essential items, while essential items could be left alone. One must keep in mind that the fundamental difference between controlling imports through fiscal policy and monetary policy is that fiscal policies could be targeted, on the other hand, monetary policy has blanket impact across all constituencies. Hence, at this stage, fiscal policies are maybe more appropriate to manage the external account. The import substitution, both in oil-based imports and non-oil based imports, is the only way of getting out of this is "import-trapped-growth" situation. This is at least a medium to a long term solution by introducing enabling policies to encourage local exploration, refining and above all distribution systems, in addition to promoting our local engineering industries which will not only assist in import substitution but may also provide a good base for exports in due course. In the short run, immediate imposing of ban on certain items, or to enhance duties and taxes, at the import stage on these non-essential items, would yield better results, which the Government seems to be aware of and trying to pursue. This is admitted that with such actions, the risk of leakage through smuggling may enhance but then one would argue, and argument vehemently, that this aspect must be controlled irrespective of the fiscal policies.

The other side of the coin is exports. Let's look at the composition there. There's almost a consensus amongst the economists and the practitioners that the exchange rate doesn't have "sustainable impact" on exports. Our exports are very narrow with over half of the imports being textiles, and including oil-based products and leather, the exposure goes up to 2/3rd on merely three categories of exports. There's a dire need to promote value-addition in our exports. The trade policies must be geared towards that aspect only, which again the Government appears to be well cognizant of and working on.

In nutshell, this is reiterated that at this stage, the monetary instruments have almost been exhausted and now more focus shall be on the fiscal policies to ensure maximum benefit in the short run. Given the importance of these elements, I would like to repeat that duties, cash margins, bans all together, etc., on the imports, shall be employed, while simultaneously working on the import substitution as a medium to a long-term fix. On the other hand, sustainable growth in export flows could only be achieved through a medium to long term solutions with structural changes (value-addition, non- conventional exports, etc.) and exploring new paths, like manpower exports which must be given the status of industry, and measures must be taken and offer incentives, accordingly. In immediate future, a structured and effective mechanism must be put in-place for the release of duty refunds and ensuring that the input costs for exporting industries remain competitive with the regional players. Next, and the last article, of these series of write-up, will debate on managing external account through structural changes.

# 6. Managing External Account - Structural Changes (3<sup>rd</sup> of the series of 3) \*Business Recorder\*, 8<sup>th</sup> November 2018

Further to my earlier article series: "Managing External Account - Monetary Policy" and "Managing External Account - Fiscal Policy", this is third and final article, and perhaps the most important in terms of permanently addressing the chronic issues which results in external account problems to crop-up every now and then. As I have been saying in my earlier write-ups that all other tools to manage external account are operational and temporary in nature; long-term, sustainable solutions will come with the structural changes or reforms only. I must admit at the outset that these changes are hard to implement as they require phenomenal political-will and an extremely committed and competent executive team for execution and delivery. But unfortunately, there're no shortcuts to these structural reforms anymore and as the time is passing-by the need for them is escalating given that other operational tools are almost exhausted as elaborated in my earlier articles.

The critical aspect is that to manage external account, the reforms must be bored-based and cover all the main constituencies, including internal account and taxation. In fact, the circle expands to foreign policy and managing law and order situation in the country, as in this day and age, it's impossible to divorce economy with politics. This will not be out of place to say that politics has most influence on economic factors. Globalization has also resulted in the lack of separation of local economy from international political and economic developments.

The recent economic environment in Pakistan is primarily a result of uncertainties prevailing on the political and the foreign policy fronts. The lack of boarder reforms in decades and fragile state of affairs of Public Sector Entities ("PSEs") and Institutions, make the economy exposed to political and economic shocks. Whilst the economic growth has been on the up over the last four years; however, these strengths were not institutionalized, at least not been embedded enough to sustain the moderate political vibration and; thus, inherent weaknesses started to surface, as we can be currently witnessed.

The single biggest vulnerability in the economy has presently been faced on the external account front - the growing current account deficit - which is a result of unprecedented increase in imports and almost stagnant exports. While there're concerns on the fiscal deficit too; however, that's something still manageable, albeit not through the best of tools available (in fact, a worst form in many ways) and only as a last resort - ie., printing of local currency; in other words, borrowing from State Bank of Pakistan. Nevertheless, there's at least an option available on the local currency/fiscal front to avert or defer the disastrous situation. In peaking order of risk exposure for Pakistan economy are: External Account, Taxation and Internal Account. Will discuss them all from least to worst risk in the ensuing paragraphs.

Internal Account: The local currency risk primarily emanates from funding losses of PSEs and Energy Sector. These risks shall only be addressed with an aggressive reform agenda across all PSEs and some, particularly energy sector, require fundamental structural adjustments - optimal generation mix and transmission upgradation/ enhancement. The decision-makers in the past merely focused on generation, where a very robust regulatory framework exists; transmission on the other hand was not given enough heed; resultantly, transmission became the dominant reason for load-shedding in the last 5/7 years. The policy-framework in transmission sector is still struggling and this area must

be given attention on top most priority. Similar is the case in the Petroleum Sector, pipeline infrastructure is the primary reason for chocking. The point is that the logistics (all sorts, be it in energy sector, railways, air-cargo, storage, terminal, etc.) need policy direction and fixing. These're all medium to long term issues and can't be addressed in the short-run. A part of the solution in this respect is hidden in privatization of the state own entities but only when post restructuring and enforcement of strong legislative/ regulatory changes/ structures are in place and tested. However, in the interim, as an immediate measure, the restructuring of the regulators and the large PSE is inevitable. I have a "Big Five Theory" in this context, whereby if the "Five PSEs" and the "Five Regulators" are fixed - select the best professionals to run these entities, empower the professionals and their Boards to run these entities, without administrative interference from the relevant ministries, then the issue of fiscal deficit will be largely taken care of within the next 3/5 years. For the time being, this is the least of the risk areas in the order of attention priority, due to last resort option's existence, as discussed above.

Taxation: The recent initiatives by the current Government are in the right direction. The fundamental reason for taxation issues emanate from the fact that the whole taxation regime has become too complicated and there's an element of increased intimidation by the taxmen for the genuine tax payers. Harassment is the single biggest hurdle that keep people from paying taxes. The other factor being the lack of trust on the Government to judiciously use the tax collected from masses; in other words, the element of corruption and leakage in the system. This is, therefore, imperative that the interaction between the taxmen and the taxpayer is reduced to the minimal. This is possible through: i) use of technology; ii) flat tax regime, particularly in customs; and iii) substantial reduction in direct taxes. The total net contribution of direct taxes in the revenue collection of FBR is merely 12% whilst on the other hand the direct taxes require heavy paraphernalia and resources. The truth is that we, as a nation, for right reasons or wrong, do not pay taxes voluntarily; therefore, it makes sense to collect the taxes through indirect sources which are not only cost efficient but also effective in terms of collections. There's an argument which is raised by the tax-experts that indirect taxes, in the strictest sense of the word, are discriminatory in nature and direct income taxes, on the other hand, are more just. This argument has its own merits; however, this also has the element of vested interest plus with slight tweaking of the indirect tax proposition/ structure (making it ad valorem), the opposition to this point of view could be totally killed. With the above measures, not only the number of tax payers will enhance, but the amount collected will also be boosted. The flat tax regime too has its own merits and it's been argued vehemently by International financial experts and think tanks. The flat tax in our case is critical to check the discretionary powers of the taxation machinery; thus, mitigating corruption and harassment. As mentioned above, making the taxation system simpler and eliminating the interaction with the taxman alone will help in enhancing the taxation collection. This objective could be achieved through some policy changes discussed above and with the use of technology. Whilst FBR has come a long way on the technology front; however, this area still requires reforms and professional's engagement. There will be a considerable resistance to this change, for obvious reasons; therefore, strong political and institutional will and commitment is a prerequisite as the reforms are absolutely inevitable in FBR.

Now the real elephant in room and the main topic of our debate: The External Account. This area must be looked into short and long term measures. There're very limited options available in the short run other than borrowing (be it swap funds, term deposits, loans or otherwise) from the various available sources and perhaps getting free access for our exports to the markets like China, EU, etc., where our competitor countries like Bangladesh, India, Vietnam, have very clear edge over us. The only other promising opportunity on the external account in the immediate future

are the "enhancement in Worker Remittances". There's still a very large chunk of remittance out there (US \$15/20Bn) to be attracted through the banking channels which currently either comes from non-banking/ unofficial channels or don't come at all and get invested in various saving instruments in the overseas Pakistanis' resident countries. To attract these remittances, we need saving instruments (for example, Overseas Pakistanis Saving Certificates, etc.); and perhaps offering a preferential exchange rates as special incentive to the overseas Pakistanis for routing remittances from the banking channel. Currently, the banks, through which the remittance comes into the Country, are paid subsidy; instead the benefit of this subsidy maybe paid directly and passed on to the ultimate remitter or eventually to the beneficiary. This way, we may be able to discourage people from going through the unofficial channels and encourage more remittances via banking channel in the short run. While another short-term measure - another Amnesty Scheme - is perhaps a good move but it's a one-off measure (not a recurring benefit) and it must have unwavering buy-in from all the pillars of the State; otherwise, this measure will not bear fruit. Furthermore, for immediate future, IMF is virtually inevitable. Not because of money but because of our international positioning to meet our FX funding needs on a sustainable basis, and more so, for implementing the much-needed, broad-based, structural reforms. However, we need to take the discussion forward with IMF with care, which the present Government seem to be doing. We should talk to IMF with the position of strength and that strength we can be drawn from the visible investment support from China and KSA. KSA recent support has proved to be a "man-o-salwa" (food from heaven). The integrated petrochemical complex (US \$10bn ish) is a long term play and happens to be falling in the defined CPEC territory. Given the strategic nature of the project, this is in the best interest of all 3 stakeholders - Pakistan, KSA & China - that this project goes through. Like any commercial project, this project will also have its debt and equity components. We need to appreciate that all these projects are set- up on commercial lines and in line with the established financing principles. Since equity is always more expensive than debt; therefore, there will always be a predominant debt portion in all the commercial projects (maximum to the extent possible), irrespective of where they're located within CPEC or outside, simply because it improves returns for the investors. If this principle is settled with us then our apprehensions about the CPEC projects will subside to a very large extent. In medium to long run; however, import substitution (something always resisted and opposed by the Template Institutions - i.e., IMF, World Bank, etc.), particularly in the area of energy security (E&P, Refinery, etc.), and structural changes in exports to promote value-added textile products and encourage non-conventional products and services particularly in agriculture, technology, etc., through policy intervention, are the only solution to fix this on-going issue of current account deficit. The whole trade-policy, budgeting exercise, energy-policy, and other policy decisions, consistently over a 5/7 years, must be in-sync and shall revolve around predominantly one objective - self sufficiency in the area of external account - and then only we will be able to address the issue of external account deficit once and for all and get rid of the Template Institutions to ensure long term sustainability of the economy and ourself-pride and sovereignty.

# 7. Devaluation, Interest Rates and Empress Market

# The News International, 7<sup>th</sup> December 2018

One would wonder what's the analogy between devaluation of Pak Rupee, interest rate enhancement and empress market clean-up operation. For one, they all seem to represent the construct of others. The other similarity is that they merely provide a temporary respite as they are done without the proper back-up/ structural arrangements. Things are always short-lived, if they're done in a half-baked way. In case of empress market, for example, much needed and most difficult anti- encroachment operation was done in an impressive fashion; however, since the permanent alternate to the displaced has not been provided; therefore, the risk of dislodged ones settling back in is very high. As a matter of fact, the birds have already started flocking back in small batches. This is not the most satisfactory state of affairs and if things come back to square-one within the next few months then this whole effort will go waste. Similar is the case with devaluation, and of course the monetary policy decision. It's been done in isolation and without the required structural arrangements; therefore, this is not likely to provide the necessary breathing-space and if there are any benefits, those will be evaporated in the immediate future, like the empress market situation.

Let's establish the fact that the currency movement in Pakistan is not purely a market- driven phenomenon. Policy rate, in any case, is decided by the monetary policy committee, so much more discretionary, as such. While monetary policy calls are made free of any influences and keeping in mind the larger government policy; however, the currency adjustment decision is almost always totally based on different pressures on the Government, including IMF's and multilaterals. The multilateral being "Template Institutions", follows same template for each country when these countries come to them for rescue package/ funding support as a last resort. Devaluation and policy rate hike are always a major trigger and recipe for salvage/ recovery of precarious economic situation in these templates.

The decision of monetary policy is based on host of factors but predominantly it's based on external account position as it has had a history of fragility. The decision of policy rate is not as mechanical as the currency's, per se. There is a well-established formula to determine the currency competitiveness introduced by IMF, called REER (Real Effective Exchange Rate). REER is calculated based on host of economic factors of the trading countries with weightage assigned to each trading partner to determine the competitiveness of Pak Rupee vis a vis the currencies of other countries competing in trade with trading partners of Pakistan; ie., in terms of currency, is it feasible for the trading partner to trade, particularly exports for us, with Pakistan or another country competing with Pakistan. Movement in any factor with the trading partner, results in the change in REER.

Since we've negative trade/ current account balance (now a wide one) and in the absence of structural reforms, if we follow the REER model, then we will always be in a currency parity catching-up mode, as we have been doing in the past, unfortunately. While our trading partners, including four major countries - USA, China, Germany and Japan - constitutes over 50% of the cumulative weightage in the working of REER, out of the total of 25 countries, having been posing economic progress in relative terms to ours. The fact is that given the situation on the ground and the lack of progress on some basic structural changes, we will always be lagging behind as opposed to these trading countries. Hence, devaluing currency or increasing interest rates to slow-down the economy, to manage current account balance and keep PKR competitive, will always be a partial solution to the larger issue at hand. As have been argued in the past,

this will in fact do more harm than help if stretched too much - the stage we already seem to have come to. The consequence of this policy is that we will end-up compromising on the GDP growth, which is a proven formula for poverty alleviation, and still be in a catching-up situation, assuming structural reforms are not undertaken.

Net net, we need to first answer a simple question "if devaluation and policy rate increase good for our economy?" In the absence of structural reforms, the answer is very simple, this is not, and it leaves us with very simple choices - either to defend the currency or to remain in a parity-grabbing-contest based on REER. The cost-benefit- analysis of the two choices is not easy. It's, in-fact, a very complex model based on loads of economic and social factors. Perhaps, it's worth Government's while to get an independent assessment done from the qualified international consultants then merely relying on its own resources and/ or IMF's advice.

The policy-makers focus on difficult structural reforms; let these two tools of currency devaluation and interest rate raise be for a while. Any further usage of these tools will do more harm than help, and may cost economy more than it would to defend the currency.

The commonality of devaluation and interest rates with empress market was chosen on purpose to make general public appreciate the impact of devaluation and interest rate ramp-up on their lives. Hope this will help in putting things in perspective.

# 8. Worker Remittances: "Deserves Industry Status"

# The News International, 12th January 2019

We have seen a substantial flow of foreign workers remittances over the past 5 years. The number is very impressive at over US \$94Bn, and the growth trend is continuing, albeit at a slower pace, which is understandable as the remittance gap between the formal and informal channel is narrowing. At the same time, the gap between remittances and exports are also narrowing down on our external account. This makes the importance of remittances more and more critical than the past. The remittances growth hitherto has largely been "God sent"; the sector needs "baby-sitting" and "pampering" to ensure that this growth trend continues.

Focusing on remittances doesn't mean that we don't address the outstanding structural issues and constraints faced by our exports sector which, in fact, is more important than remittances in many ways, and the present Government has already realized this and started taking policy decisions in extending the necessary subsidies to the exporters. There's an argument, on the other hand, that our export sector has been behaving like "Trust Fund Baby" and it's about time that they "stand-up on their own two feet" but that's a debate for some other time. In this write-up, we're focusing on remittances from Non-Resident Pakistanis ("NRPs").

The current worker remittances have essentially been consumption-driven which can be verified from their constant growth and inelasticity with both interest and exchange rates, which moved in both the directions during the last 4/5 years, but there has been a consistent growth in remittances. While there's substantial room for improvement to attract further "consumption-driven" remittances, which are still being routed through non-banking channels, by mobilizing foreign banks and more so foreign operations of the large local banks. Capturing these enhanced flows are largely have to do with the large local banks being not focused on this business and going an extra-mile in attracting these remittances from the non-banking channels.

Let's dissect the causes of preference of remittances from the non-banking sector. This is identified that the cost of transaction, speed, security of funds, geographic proximity/ accessibility, convenience in terms of familiarity and language, are the primary factors which attract the remitter towards the non-banking options. The attractiveness of formal and informal channels varies greatly across these factors.

Siddiqui and Abrar (2003) find that costs of informal channels in Bangladesh are about 45 percent of formal costs. Costs in the informal sector are about 2-5 percent of the amount sent, while costs in the formal sector are on an average about 10-20 percent. Available empirical evidence also supports the second assumption — the elasticity of total remittances sent or received with respect to costs is very low. Aggregate remittances will; therefore, depend on wages in the host economy, income in the source economy, and the total number of migrants. Dual FX regime and remittance costs (vis a vis average size of the remittance) are the two factors which drives the gulf between the informal channels and the formal channels of workers remittances. Cost reduction could be usefully pursued through measures to enhance competition in the banking sector, promote financial development, and reduce exchange rate volatility. This is about time that the banks must look into the possibility of sharing/ passing-on the benefits of direct and indirect subsidies/income streams - Float Income, FX Conversion Spreads, GoP's Direct Rebate - with the end remitter and make the overall

proposition of remittances through the banking channel more attractive for both the banks and the remitter. The play shall be on volumes rather than margins for the banks.

Informal, or non-banking, channels are typically faster and more convenient as they are not constrained by banking and foreign exchange regulations and often work in close proximity to their clients and frequently provide door-to-door services. An element of intimidation to deal with the bankers (formal set-up) also plays up on the minds of blue-collar worker which is a large population of Pakistan workers abroad, particularly in KSA and GCC.

This is assumed that the existing consumption-driven remittances could actually be doubled through the official channels within a period of 2/3 years, if the foreign operations of the large local banks and the relevant Government Departments/ Ministries work in close collaboration with each other. A close alliance and working relationship is absolutely critical between different Ministries/ Departments of the Government of Pakistan ("GoP") including Ministry of Finance ("MoF"), Pakistan Remittance Initiative ("PRI"), State Bank of Pakistan ("SBP"), Overseas Pakistani Foundation ("OPF"), Central Directorate of National Savings ("CDNS"), Ministry of Labor and Manpower, Foreign Ministry, etc.

To enhance the "Consumption-driven" remittances, following ideas could be considered:

- I. To begin with, PRI shall be given more visibility and importance. <u>PRI shall be declared at least a wing of the Finance Division</u> and shall be manned with the best talent in the market.
- II. Setting-up Community Centers in the large ethnic Pakistani populated cities including cities in KSA, UK, USA, UAE, Oman, Qatar, etc. to primarily target the blue-collar workers. Remittances from GCC adds up to almost 2/3rd of the total worker remittances of Pakistan. The research says that one of the identified reasons for the blue-collar workers to use the non-banking channel is that they feel intimidated going to the bank and dealing with "strangers" or "sophisticated individuals". These blue-collar workers find the whole ambiance of the bank overwhelming at times. On the other hand, the money changed/ hundi/ hawala facilitator comes to the doorstep of NRP to collect the money and remit it back-home. There are no remittance forms/ documentation to be filled-in which is obviously a big help but poses a serious risk of fraud (some cases recently been reported). The local banks should be motivated to set-up Infrastructure - develop Pakistani Community Centers (instead of full-fledged branches) - jointly with OPF and perhaps with CDNS. These centers should consist of Restaurants/ Foodmarts, Entertainment; e.g., Ethnic Films/ TV Programs, Musical Events, Theater, Spiritual Events, etc. OPF has a specific mandate and adequate resources to set-up these community centers. There may be some community centers already existing which probably are not been managed/leveraged to the fullest potential and could be revived for the purpose. The idea is to have a strong alliance between the banks and the OPF to manage these community centers to attract Pakistani blue-collar worker traffic, which otherwise avoid going to the bank, making the whole experience of remittances for them convenient and pleasurable through these centers. Leveraging Community Infrastructure for Cross Sell Opportunities for the local banks which can result in Building NRP Customer Base, Deposit Mobilization, Asset Building, e.g., Mortgage financing against pledged remittances, etc., Building brand image (bringing a step closer to opening foreign branches), is an incentive enough for the banks, particularly the Provincial Banks, to pursue this joint venture proposition with OPF.

According to the Bureau of Emigration and Overseas Employment, after Punjab (58%), KPK represents the 2nd biggest registered overseas work-force of 32%. Sindh and Baluchistan are far behind at 9% and 1%, respectively. This data helps us figure out that if we mobilize our Provincial Banks - particularly Bank of Punjab and Bank of Khyber - with some specific targets than they could be most suited to attract these flows internationally.

- III. Rolling-out <u>Remitter/ Investor Education Program.</u> The NRPs need to be educated about the benefits of the remittances through the banking/ official channels overall costs & benefits, tax breaks in case of investments, security, official track-record, etc. This education must be conducted through written literature and propagating in the media, both electronic and print. The above proposed community centers will also prove to be a great platform for such education.
- IV. The GoP/ SBP must encourage opening of smart branches of Pakistani banks at the Pakistani dominated/ populated areas globally with specific focus of enhancing the NRP remittance flows. If branch/es already exist then make the <u>Dedicated Service Desks</u> mandatory to facilitate remittances from these international branches of local banks.
- V. The GoP/ MoF should seriously consider offering <u>Tax Breaks/ Fiscal Incentives</u> to the banks on the income earned through the incremental remittances. This formula/ incentive plan must be devised in such a way that the risk of cannibalization in existing remittances amongst the local banks does not happened.
- VI. There already an existing provincial bank in Azad Jammu and Kashmir ("AJK"). This bank may need to be recapitalized, albeit to the requisite minimum amount, and rejuvenated into of a fully dedicated, technology-driven bank, to penetrate into the remittances from the affluent AJK ethnic community based globally but particularly in the UK. This bank will not only help in the economic uplift of AJK but also help in channelizing the remittances through the official channels which may currently been diverted through the non-banking/informal sources due to lack of dedicated banking facilities at both ends of the remittance equation origination and termination. While the number of AJK expats may not be too large in number but surely, they are highend in terms of amounts/ transaction value, therefore, more sophisticated remittance solution fits in well with their profile/ needs.
- VII. Tap into the existing NRP Community Groups/ Associations and NRP owned Restaurants/ Retail Centers to educate the community on the benefits of using banking/ official channels. The <a href="NRP owned Restaurants/Retail">NRP owned Restaurants/ Retail</a> Centers can be used as technology-driven point of remittances in-alliance with the large local banks (primarily using phone banking, internet banking, etc.) subject to, of course, regulatory approvals.

 $Implementation \ Timeline-Each\ Initiative\ (Consumption-driven):$ 

	Immediate/ Within 6-Months	Within 9- Months	Within 12- Months	Within 12-18 Months
Setting-up Community Centers				√
Remitter/ Investor Education Program	√			
Dedicated Service Desks/ Foreign Bank Branches	√			
Tax Concessions/ Fiscal Incentives			√	
Rejuvenate AJK Bank		√		
Convert NRP Retail Outlets/ Restaurants into Remittance Centers				√

There is an immediate need is to come up with "Investment/ Saving Products" which will provide a medium to long term, sustainable foreign currency flows to the Country. The current Government is already working on two of such options: The one-off "Pakistan Banao Certificate' and the other is a program by National Savings called "Overseas Pakistanis Savings Certificates". Both these products will go a very long way in terms of attracting savings inflows from NRPs.

#### The other "investment products" that the Government could consider are:

- I. GoP has already rolled-out the plan for privatization. They may consider Secondary Market Offering shares of Public Sector Entities ("PSEs") in Oil and Gas and Financial Sectors in particular. International investors have fairly large interest in these scripts/ shares. The whole idea is to make these Secondary Market Offerings dedicated for NRPs. These offerings will be done in small denominations to encourage small investor to participate and become the owner of their own PSEs. The objective is to spread the holding of PSEs all across the masses, particularly to the small investors within Pakistan and outside. Similar instruments were issued by UK, Germany and other European Countries in 8os and 9os while privatizing their PSEs. This initiative will also help in increasing the much-needed depth and breadth in Pakistan Stock Exchange.
- II. Encourage <u>Mutual Funds to arrange Road-shows internationally</u> to attract investment in foreign currency through a SCRA account and allow them to <u>Launch Foreign Currency Hedged funds</u>. Especial incentives tax-related &/or otherwise, could be offered on the income earned from the sale of these mutual funds to the international investors/ NRPs.
- III. The option of <u>Retail Bond/ Sukuk structured against the future Workers Remittances</u> is always there. However, this option poses a very high risk of cannibalization of future savings-driven inflows, and additionally this kind of bond/ sukuk is better suited for the institutional investors, while we're focusing/ discussing on tapping the retail investor-base.

Implementation Timeline - Each Initiative (Investment/ Savings):

	Within 6-9 Months	Within 12-Months
Foreign & Local Currency Certificates for NRPs	√	
Secondary Offering of PSE Shares to NRPs (under the GoP's Privatization Program)	V	
Mutual Funds – International Roadshows and Launch of foreign currency Hedged Funds		<b>√</b>
Retail Bond/ Sukuk against future Workers Remittances		√

Enhancement in worker remittances is the only viable option available for the Government to meet its current account shortfalls in the short to medium term. Exports are being promoted with various policy actions: however, our export sector is confronted with some structural issues, like lack of value-addition and dependence on few sectors and products (we're virtually a three-product exporting country), which will take some time to address, at least medium to long term. In the meantime, worker remittances remain the most promising option to pursue to fund our chronic current account deficit, and shall be given the importance, accordingly.

# 9. Fiscal Deficit Management - The "Big Five" Theory

# The News International, 10th January 2019

Unlike external account, fiscal management remains in the hands of the Government. There're two main components of fiscal account - taxation (Federal Board of Revenue "FBR") and non-tax (Public Sector Entities "PSEs"). Both these components doesn't require any external support and assistance, as such, and it could all be handled with the political-will and the right policy actions by the Government.

That's where the theory of "Big Five" comes handy, whereby the idea is that "top five regulators" and "top five PSEs" shall be made independent and eventually reformed. This will help in addressing the fiscal deficit to a very large extent, and perhaps completely over a period of time.

There are about 18 regulatory bodies in the country: the State Bank of Pakistan ("SBP"), the Securities and Exchange Commission of Pakistan ("SECP"), the Federal Board of Revenue ("FBR"), the Competition Commission of Pakistan, the Pakistan Electronic Media Regulatory Authority ("PEMRA"), the National Electric Power Regulatory Authority ("NEPRA"), the Oil and Gas Regulatory Authority ("OGRA"), the Drug Regulatory Authority, the Civil Aviation Authority ("CAA"), the Pakistan Telecom Authority, the Pakistan Nuclear Regulatory Authority, the Pakistan Standards and Quality Control Authority, the Public Procurement Regulatory Authority, the Private Education Regulatory Authority, the Pakistan Medical and Dental Council, the Pakistan Engineering Council, the Pakistan Nursing Council, the Pakistan Tibb Council, the Pakistan Veterinary Medical Council and the Pakistan Environmental Protection Agency. Besides, there are prime regulators such as the Election Commission of Pakistan, the National Accountability Bureau, and others.

The big five regulators which are identified for the purpose of this thesis are SBP, SECP, NEPRA, OGRA, and FBR. While there're other very important regulators as well like PEMRA, CAA, etc.; however, the top five listed regulators selected for the purposes of this thesis based on two main criteria - one: impact on the fiscal deficit; and two: direct impact on business in Pakistan. For efficient reforms and even for privatization, independent and effective regulators are a pre-requisite. Privatization without strong and empowered regulator maybe harmful than help for the overall economic impact and progress stand-point.

On the other hand, there're 193 PSEs. The big five identified for this purposed are: Pakistan International Airlines ("PIA"), Pakistan Railways, Water & Power Development Authority ("WAPDA"), National Transmission & Distribution Company ("NTDC"), and Oil & Gas Development Company Limited ("OGDCL"). These entities have been shortlisted based on three arguments - first: optimal exploitation of natural resources (water, gas, etc.) and import substitution; second: impact on logistics as that seems to be the biggest chocking point in the overall scheme of things in terms of smooth business operations & growth and must be addressed on priority; and third: impact on fiscal account. Pakistan Steel is not included in the list as this business shall be promoted in the private sector, in any case.

Since FBR has the role of both of a regulator/ policy-maker and a collection agency, in other words a sort of PSE, with the agenda of revenue collection with incentive plan; and hence, it could have fallen in the jurisdiction either as a regulator or a PSE. However, in the strictest scene of the word, it's considered as a regulator and therefore, in this thesis this is included in the list of regulators only.

The taxation piece of the fiscal account requires structural reforms which are already underway. The fundamental reason for taxation issues emanates from the fact that the whole taxation regime has become too complicated and there's an element of increased intimidation by the taxmen towards the genuine tax payers. Harassment is the single biggest hurdle that keep people from paying taxes. This is, therefore, imperative that the interaction between the taxmen and the taxpayer is reduced to the minimal. This is possible through: i) use of technology; ii) flat tax regime, particularly in customs; and iii) substantial reduction in direct taxes. The other factor—being the lack of trust on the Government to judiciously use the tax collected from masses; in—other words, the element of corruption and leakage in the system. This could merely be addressed with the better governance over a period of time. Making taxation system simpler and eliminating the interaction with the taxman alone will help in enhancing the taxation collection. This objective could be achieved through some policy changes and with the use of technology. Whilst FBR has come a long way on the technology front; however, this area still requires reforms and professional's engagement. There will be a considerable resistance to this change, for obvious reasons; therefore, strong political and institutional commitment is a prerequisite as the reforms—are absolutely inevitable in FBR.

As part of the restructuring of FBR, the Government has already announced to divide the FBR structure between "policy" and "collection". This distinction will address any existing, and potential, conflict of interest. This will also help in better engagement of the policy-makers with the various stakeholders in the industry/ market to come-up with business-friendly taxation policies. On the other hand, the collection team will focus on the enhancement in collection alone without tinkering with the taxations policies to achieve the collection targets. Currently, the FBR policy-makers are on their way to introduce policies that allow for easy ways of revenue collection, including increasing general sales tax rates and concentration of withholding taxes in the revenue policy. However, these steps were putting excessive burden on existing tax payers and hence could encouraging tax evasion. With the above contemplated reforms, this is expected that the tax base will increase and the taxations policies will be rationalized for even tax burden across.

On the non-taxation front, the Government has taken an initiative to set up 'Sarmaya Pakistan' to revive the loss-making entities and make the profitable ones more efficient and profitable. The most critical aspect and objective of Sarmaya Pakistan is to get these supposed to be "for-profit" entities out of the administrative control of various ministries and exposed them to the professional management with the requisite sectoral expertise. This would require "best of the best" talent from the market, at market-based compensation, for this conceived to be the most important entity of the Country, to be run on the most professional lines, and so as the entities under the administrative control of Sarmaya Pakistan. While Sarmaya Pakistan will take some time to be adequately and appropriately resourced and operational, in the meantime, it may be a good idea to focus on the big five PSEs to be restructured.

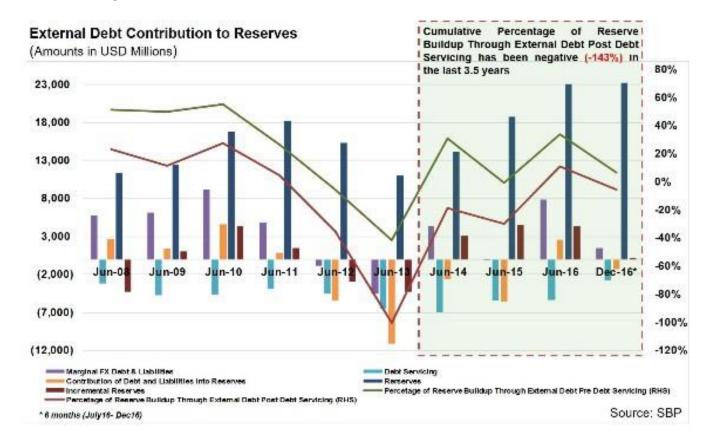
The performance of the PSEs has deteriorated over the past many years because of a host of factors, particularly the lack of relevant skills and expertise in the administrative ministries and divisions for guiding and helping companies to perform in a professional and competitive way.

The Government shall select the best professionals to run these entities, both regulators and PSEs, empower the professionals and their Boards to run them without administrative interference from the relevant ministries. The oversight and control of the companies may be given to the professionals having extensive experience and expertise, contrary to the current practice where the administrative ministries and divisions have extensive control of the companies. The Board of the big fives must be headed-up by the best professionals from the private sector while the majority of the board will be pre-dominantly private sector to ensure almost no, or at least minimal, involvement of the public sector influence while the overall Government policy is appreciated and followed. The private sector representatives shall not be less than 75% of the board to ensure super-majority in independent decision-making. The selection of the private sector board members will be the key in the process. The cabinet have to put the process in-place for apolitical and professional selection/ appointment of the board members, and that aspect, along with the selection of the CEO and the other management members, will guarantee the ultimate success for the Government in addressing the fiscal deficit.

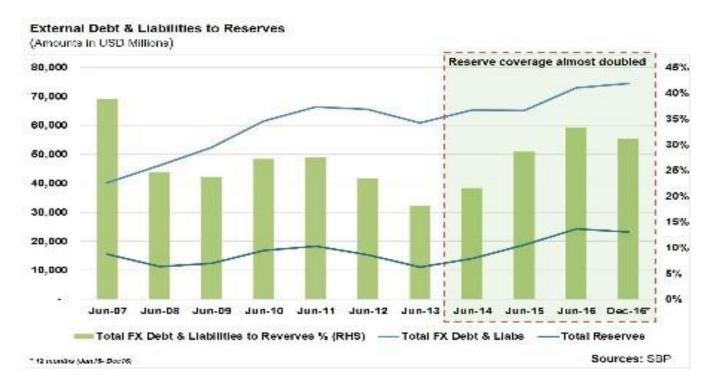
### 10. FX Reserves Accumulation - Glass Half Full

# Daily Dawn, 19th April 2017

There has been a recent debate in the newspapers that the accumulation of FX Reserves over the last three years have been achieved through external borrowings. This is a classic example of viewing a glass of water as "half full or half empty". One needs to appreciate that money is fungible and the conclusive argument can't be made for a rational mind that the money raised can merely be used for one specific purpose. There're surely various permutations and combinations that could be worked out to assess the actual utilization of the funding raised from the external sources by Pakistan. The superfluous view of the situation may lead one to jump to the incorrect conclusion that the FX Reserves are built through borrowings. However, a deeper and thorough analysis will reflect on things very differently - glass half full - and arrive at the right conclusion: Pakistan's FX Reserves have been built based on real FX flows; not through external borrowings.



An unbiased assessment of the situation will lead to the fact that if the scheduled maturities of the past FX debt are taken into account then the net addition of marginal debt acquired during the period into FX Reserves is actually



"negative" by a large number/ margin of around 143%, i.e., the incremental FX flows were actually used for paying off debt acquired before 2013. Additionally, let's also see where does things stand without accounting for the scheduled FX obligations/ debt maturities. Import coverage has been enhanced from 119 days to 204 days. This is by no mean a small achievement. Similar is the situation on the coverage of external debt and liabilities which doubled in the last three years. This is also the reason why our currency remained strong and our external account remained

In	Imports to Reserves Cover					
Y/E	Avg Imports	Avg Reserves	Cover Days			
Jun-06	24,893	13,122	192			
Jun-07	25,883	14,385	203			
Jun-08	31,078	13,523	159			
Jun-09	33,475	11,912	130			
Jun-10	31,400	14,588	170			
Jun-11	33,464	17,497	191			
Jun-12	38,083	16,766	161			
Jun-13	40,263	13,154	119			
Jun-14	40,913	12,580	112			
Jun-15	41,474	16,420	145			
Jun-16	40,814	21,513	192			
Dec-16*	41,553	23,202	204			
Amounts ir *Year to De	n USD Millions c16		ırce: SBP			

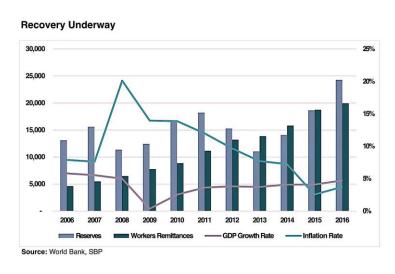
comfortable and defeats the academic thesis that the currency is over-valued. Furthermore, please note that the external borrowings as the percentage of total borrowings have actually come down over a period of time and the decline was much sharper since 2013. Comparing External Debt and Liabilities to FX Reserves show that the FX Reserves coverage has almost doubled in the last three and a half years.

After looking at this data and assessment, the argument that FX Reserves are built based on external borrowings doesn't hold waters whichever way the data is cut. This data also defeats the notion that Pakistan is sort of stuck in a debt trap, as the data proves that the previously acquired debt is being settled through the reserves and the external flows other than the fresh debt.

Y/E	Total FX Debt	Total Reserves	FX Debt to GDP %	FX Debt to Reverves %
Jun-06	33,815	13,122	25%	39%
Jun-07	36,248	15,647	24%	43%
Jun-08	40,397	11,399	27%	28%
Jun-09	47,450	12,425	29%	26%
Jun-10	51,140	16,750	29%	33%
Jun-11	55,041	18,244	26%	33%
Jun-12	54,213	15,289	25%	28%
Jun-13	47,005	11,020	21%	23%
Jun-14	50,282	14,141	20%	28%
Jun-15	54,674	18,699	20%	34%
Jun-16	61,357	24,327	21%	40%

# 11. Pakistan Risk - Myth and Reality

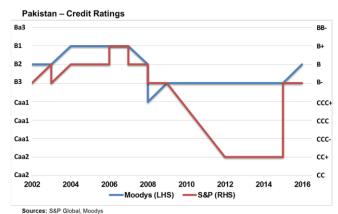
# The News International, 6th April 2017



Perception is often more important than reality. The fact is that it's the perception which is based on reality and it's actually the reality which becomes a perception as in the case of Pakistan's credit risk. There has been a constant debate about Pakistan's credit risk lately and all sorts of theories and analyses have been volunteered to make a case that the credit risk of Pakistan has been deteriorating for the last few years based on one pretext or the other - starting from abnormally high debt levels to GDP growth not being the best judge of economic progress, etc.

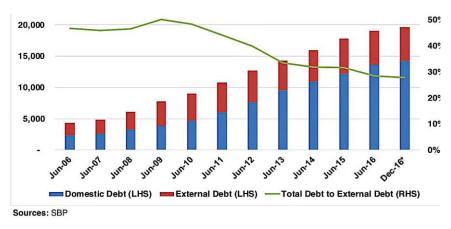
There has been an attempt to create a perception that as if Pakistan's credit risk is very high and deteriorating. This has

been an extremely unfortunate endeavor on the part of a group of local economists and politicians, whilst the rest of the world is perceiving Pakistan in a very different light the improvement in the risk rating of Pakistan by both Moody's and S&P in the last three years is an obvious evidence. Further, in the long run, there's improvement in political risk projected as researched by BMI. There's clearly economic recovery underway.



Let's look at some facts based on which the global best brains in business and economy have made their

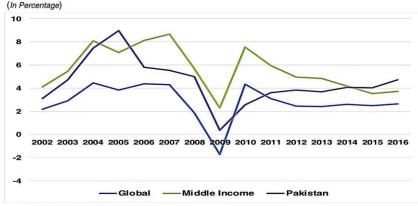
"perception and optimism" about Pakistan risk. While there has been a growing debate about the effectiveness of GDP Growth to gauge the economic development; the fact is that this is considered to be one of the most authentic sources



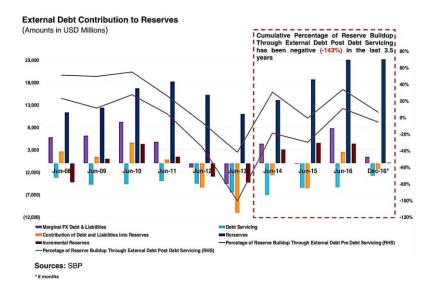
to measure the economic progress. Pakistan has done startlingly-well on this front vis-a-vis the past growth rates and the averages of global and middle-income economies growth. The world economies have been getting more and more integrated over the past few years and the case of Pakistan is no different. The argument doesn't just end here, the dilemma that the world is facing is very

interesting and double whammy - not only weak economic/ GDP growth, but also little deleveraging or in other words debt accumulation for all the wrong reasons. The case of Pakistan, however, is very different in two respects in this context - debt used for productive reasons (hence, the GDP Growth) and reduction of FX portion in the overall debt (improvement in the default risk). Debt utilized for infrastructure

#### **GDP Growth Rates**



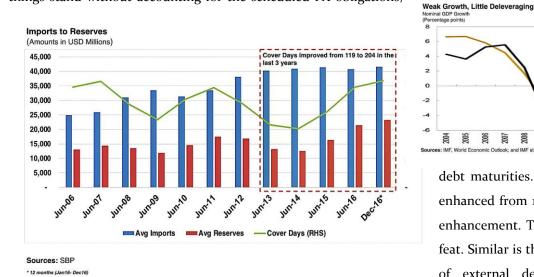
Sources: State Bank of Pakistan, World Bank



development start bearing fruits contribute towards the economic benefits with the lag; therefore, immediate growth in GDP of Pakistan is commendable. The constant improvement in the external and internal debt mix has also contributed towards the improvement in the risk profile of Pakistan as the risk of default in case of sovereign is always driven from the weaknesses in the external accounts and servicing on its FX obligations.

The fact is that Pakistan's FX Reserves have been built based on real FX flows; not thru borrowings, something that has been misrepresented and hammered into the minds of general masses by our theorist/ academic economists. This is clearly reflected that if the scheduled maturities of the past FX debt are taken into account then the net addition of marginal debt acquired during the period actually "negative" by a large number/ margin. Additionally, let's also see where does into FX Reserves is

things stand without accounting for the scheduled FX obligations/



debt maturities. Import coverage has been enhanced from 119 days to 204 days - a 1.7x enhancement. This by no means is a small feat. Similar is the situation on the coverage of external debt and liabilities which

2010

2008

2007

2004

PAGE 35 OF 66

There's also an argument that with the

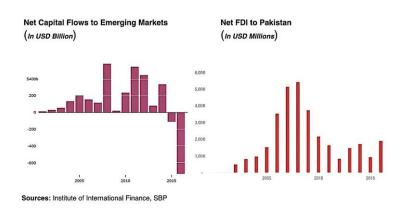
doubled in the last three years. This is also the reason why our currency remained strong and our external account remained comfortable.

#### The World Sets a Record The debt level surged to an all-time high of \$152 trillion 230 Weighted global 225 average 220 215 Percent 205 Without U.S., China 205 200 195 190 2004 2005 2006 2007 2008 2010 2011 2014 2003

exit of IMF, there may be a pressure on the external account, particularly in the light of subdued exports and stagnant remittances. The FDI is suffering across the emerging markets in any case and Pakistan is no different but it's still doing better than emerging markets. The fact also is that these reserves had been accumulated to bridge any need that may arise to keep the situation on

external account comfortable. The outlook for the next 3/4 years based on the shock- absorbers is comfortable; however, in the meantime, the reforms are inevitable especially in the areas of exports (particularly textiles) which are all under private sector. The Government has addressed the legitimate demand of exports by rolling out the \$1.8bn relief package and now it's up to the exporters to focus on the ways to capitalize on it. The situation on exports front can only be

Sources: IMF, OECD, Bank for International Settlements and Dealogic

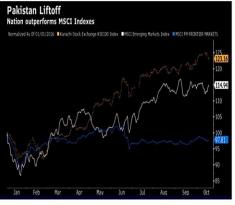


arrested through the combined efforts of both Public and Private Sectors. The FDI across emerging markets is suffering and there has actually been exodus of investment flows; however,

Pakistan's FDI flows, albeit weak, having been positive which indeed is a cause of consolation. The further good news is that Pakistan's net international investment position is relatively minor at 28.6% of GDP, compared to region's average

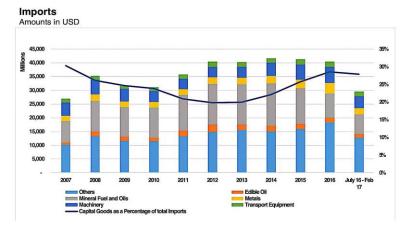
#### **Pakistan Stock Outperforming**



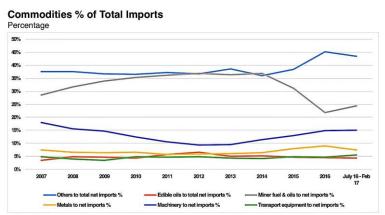


of 33.7%, which suggests that the risks of a balance of payments crisis are much lower, than the other countries in the region. Further, on the portfolio investment front, PSX, being one of the best performing stock markets in the world, upgradation in the MSCI index is expected to attract over USD 1.5bn incremental investment

over the next 6-months or so, according to the market experts, once these uncertainties on the political front settles down. Pakistan's current account has recently flipped into deficit, after being in brief surplus in fiscal year 2015/16, which was another contributor to the foreign exchange reserves. The reason is that surging financial account inflows, in part driven by the China-Pakistan Economic Corridor ("CPEC"), have enabled a sharp rise in non-oil imports,



and that also predominantly machinery. This is probably the best news that has come out of the whole discussion on the external account. This is a capital expense which may create some stress (and debt accumulation) in the short run

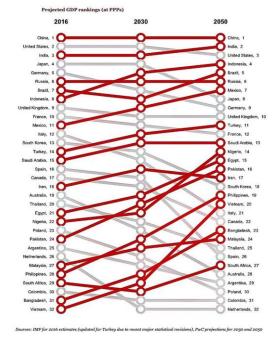


years, the Country risk almost halved - down from over 15% to less than 8% now and improving. While there maybe ups and downs on the external account and debt to GDP ratio; however, the outlook is very positive, and that has been recognized across the globe for all the right reasons, as the existing economic policies of the Government are for the future and driven from the need for the medium to long term prosperity and sustainable economic growth for the years to come as argued through the data in this write-up. This hypothesis has been reinforced/ endorsed by the most recent analysis by PwC. In its report: "The Long View: How will the global economic order change by 2050?", based on the GDP at PPP, Pakistan's ranking is projected to improve from 24th number now to 20th and 16th, in

2030 and 2050, respectively. That's what the "reality" about the

Pakistan credit risk.

but in the medium to long term, for certain, this development will only help achieve sustainable economic growth. We, as a nation, need to be patient and await for the far reaching benefits of the development/ policy decisions which will only show up over a period of time but it's not too far in sight. Based on the above developments, Pakistan's risk premium declines as the economy expands, and over the last five



## 12. National Savings: The Cat is in the Bag

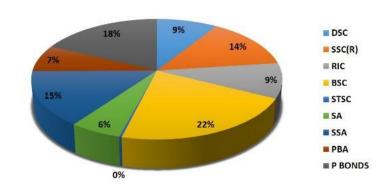
## Business Recorder, 26th June 2017

From profit rates to automation, from customer profile to product offering, from customer service to organizational structure, etc. etc. National Savings has always been part of discussions and debates in drawing rooms and on streets. This is not a surprise given that National Savings touch the lives of almost 1/4th of each Pakistani directly or indirectly. While some of the criticism on this organization is genuine as there's huge room for improvement and reforms; however, in most of the cases, this censure has been undue and based on the lack of understanding or exposure with the organization. In order to address this misunderstanding, this write-up has been prompted which will share some facts about National Savings

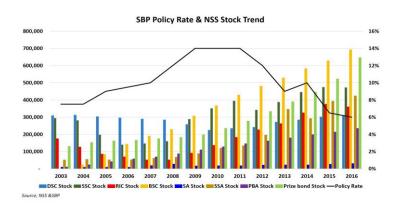
Status	An attached Department of Finance Division						
Origin	Established in 1944 during world war 2						
Vision	To Promote and inculcate the value of thrift for mobilization of savings						
Mission	To be the preferred institution for SMALL SAVERS to facilitate objective of FINANCIAL INCLUSION and extending SOCIAL SECURITY NET to the deserving sections of the society						
No. of Employees	3,349 (4,392 Sanctioned); 370 Project (479 Sanctioned) and 940 3 <sup>rd</sup> Party						
No. of Customers	Over 4 Million (Over 7 Million with Post Office & Banks)						
	No. of Branches						
Total Portfolio	<b>R3</b> 63.41 Billion (as of May '17)						
Transactions	150,000 per day						
Product Basket	<ul> <li>i. From 3 months to 10 years (Tenor)</li> <li>ii. From Youth / Students to Senior Citizens</li> <li>iii. From Individuals to Pension Funds</li> </ul>						

Over a period of time, particularly in the last decade, National Savings transformed itself from a retail debt raising arm and the source of infrastructure funding of the Government into a formidable vehicle for Financial Inclusion and a provider of Social Security to the vulnerable sections of the society. This is very interesting to see and analyze that in the product mix of National Savings, 1/3rd of the total product mix comes from the social welfare schemes which were launched in 2003 only. The yearly growth in these schemes having been consistent.

#### Product Share of NSS Stocks (as of May-17)



Source: CDNS



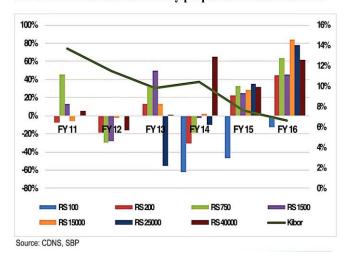
National Savings products have traditionally been profit rate sensitive, recent research done by Standard Chartered ("The Race to Save"), suggest that almost 30% of the investors make the decisions based on interest rates and hence there has been an erratic trend in the product mix as can be seen from the graph herein. This trend is; however, changing and the bigger idea is to achieve inelasticity of National Savings Schemes ("NSS")

demand with profit rates.

The strength of the product bouquet of National Savings is such that it provides an inherent balancing act – when the demand for one product is down, the other becomes more attractive – e.g., in the low interest rate environment, traditional products of National Savings take a beating; whilst demand for prize bonds move up as the appetite of the investors to take a chance on the prizes, and to forego the fixed return on their investments, goes up.

The social welfare products of National Savings remain largely insensitive to the interest rates. The fact is that

#### Prize Bonds movement inversely proportion to Interest Rates



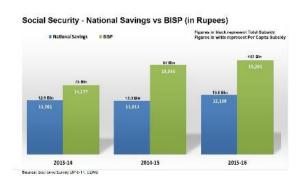
there's a very large number of investors of National Savings who lives off, and meet their ends through the monthly

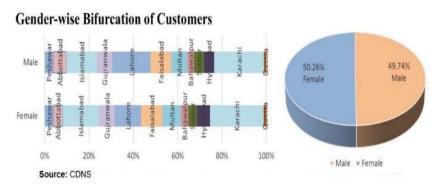


return on their investments in these social welfare schemes. Government is aware of this situation of the investors of National Savings and ensure that the rates remain at the levels which allay these concerns. The greater idea is that NSS provide the investor a

decent/
valuable
amount of profit
every month to

live in the society with respect and dignity. Almost 50% of the total profit that National Savings pay-out every year goes for these welfare schemes which shows Government's unwavered commitment towards the deserving sections of the society.





National Savings remain the most effective and formidable vehicle to support financial inclusion, particularly women. More than 50% of the investors of National Savings are women vs merely less than 4% in the banking sector and average 25% in South Asia - a testament of true financial inclusion and women empowerment. This is evident from the

State Bank data that the technology plays a vital role in women financial inclusion. The number of women mobile accounts as the percentage of total mobile accounts have increased from 14% to 21% in 2015-16, keeping this statistic in mind and the fact that over half of the savers base of national savings are women, special emphasis is being put on

# Gender-Wise Breakdowns of Mobile Wallets/Accounts



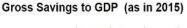
Fernale ratio in active accounts increased to 21% in 2016 as opposed to 15% in 2015.

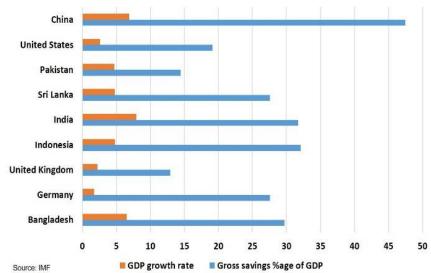
Source Quarterly Branchless Banking Newslatter Oct- Dec 2016, State Bank of Pakistan

offering of mobile wallet/ accounts through system upgradation and rolling out alternate delivery channels on the top most priority basis.

Pakistan has one of the lowest saving rates in the region which has direct relationship with the economic growth rates. Whilst National Savings, as an institution, contributes less than 1% towards the GDP and around 10% in the Domestic Savings to GDP Ratio of 7.5%; however,

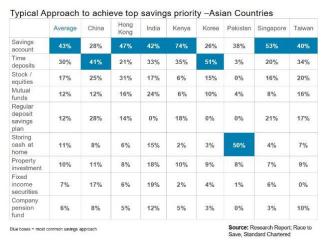
there's substantial room for improvement on these ratios over a period of time and perhaps this important Government vehicle shall take a leaf on this. Realizing the emerging importance of National Savings, the Government has initiated the process of restructuring of this very important but highly misunderstood organization with the resurrection of the corporatization which was initiated and has been pending for over a decade. The customer service remains at the





heart of the reform agenda. All the initiatives taken are with the objective to provide the best in class service to the customers. Given the nature of business and products offered, customers of National Savings are much more demanding

than usual banking customers; therefore, customer service, in case of National Savings, becomes even more critical than otherwise in-service industry.

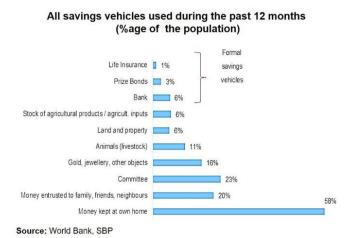


Effective communication is the most powerful way to addressing, proactively and retroactively, the concerns of both external (customers) and internal (employees). Listening to the customers can only help in improving public delivery. Therefore, opening-up of more channels of communication with the savers. Customer service and complaint resolution mechanism of National Savings have significantly been improved along with revamping of its existing website (www.savings.gov.pk) which is made much more user-friendly and topical, activating social media (FaceBook, Twitter, Instagram, WhatsApp), rolling out of

SMS service to the clients and employees, and establishment of a dedicated Complaint Resolution Cell in the Director General's Office.

The first and the foremost element of reforms was to improve controls and put the right HR structure in-place. Its existing centralized organizational hierarchy has been restructured by bringing it on modern corporate lines, while empowering field offices by delegating powers in newly established Zonal offices which were formed based on cluster of three regions each. Transparent posting and promotion policies have also been laid down and implemented. Audit

and Accounts have been separated for ensuring transparency in the financial matters. Special focus has also been given to training and capacity building of the staff. Internal communication amongst organization's employees has also been enhanced by launching a quarterly newsletter and introducing specific online communication groups which have immensely reduced the time-consumption for initiation and execution of decisions.



The data of cash storage at home in Pakistan is startling as shown in the table; "Typical approach to achieve top

savings priority in Asia". Therefore, one of the key objectives of National Savings is dematteressing the cash. During 2016-17, National Savings has taken numerous strategic initiatives for strengthening of the National Savings Schemes. After a gap of over 7 years, National Savings successfully launched a new product in March this year - first of its kind Rs. 40,000 Premium Prize Bond (Registered), which is issued only to investors in their own names and has the unique features of both profits paid biannually and attractive prize money through quarterly draws. Both the profits and the



prize money are directly credited into investors' bank accounts which has also been offered for the first-time. This product is a major step in achieving the much-needed documentation of the economy - a very bold and proud initiative on the part of

the Government. Despite distribution constrains (sale only through SBP offices currently) and stringent documentation requirements, the response on the product is very encouraging. The Finance Minister has directed National Savings to digitize the existing Rs. 40,000 registered prize bonds and include other bonds of smaller and larger denominations in the registered category within the next Fiscal Year. The distribution channels for these registered prize bonds are being enhanced.

Another historic initiative - National Savings became the only non-banking member of National Institutional Facilitation Technologies (Pvt.) Limited (known as NIFT) - the Banking Clearinghouse. With this initiative, the profits of National Savings investors can be collected into their respective bank accounts; thereby, offering safety and security and access to ATMs, Internet &

Financial Literacy Increased Compared to 2008 in 2015 % of Person who said they've heard and understands these terms 90% 80% 70% 60% 50% = 2008 40% 2015 30% 20% 10% 0% Cheque Mobile Interest charges banking book banking Source: World Bank, SBP

Mobile Banking of their respective banks. The overall improvement in time for the collection of profits by the senior citizens through cheques has been achieved from 5/10 days to 1/3 days. To further the agenda of Financial Inclusion, this is absolutely critical to get the cost of customer acquisition to be rationalized. This can only be achieved through introduction and usage of technology. The process of automation has been underway for some time now and needs



to be further improved and upgraded for customer convenience and to promote financial inclusion. On the automation side, the organization is going to complete data crunching and decentralized digitization of more than 222 (Out of 376) National Savings Centers ("NSCs") across Pakistan by September, 2017; thereafter, the third and the final phase of digitization will be initiated to complete 100% digitization of NSCs across the Country

#### by December 2019.

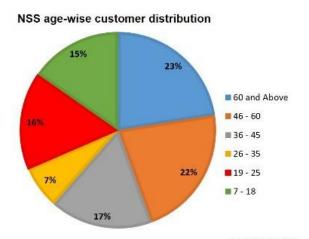
The supply-side - access points, marketing/ investor education and products - other than taxation and cultural aspects,

are the main constrains for the subdued saving rates in Pakistan. On the distribution front, other than automating our IT systems, we're exploring possibilities of appointing non-financial sector agents to get to the door-steps of the existing and the potential customers. National Savings has rolled out a major IT infrastructure revamping initiative which is being assisted by World Bank and Karandaaz. Under this initiative, a Centralized IT System with modern ERP system will be put in place to achieve double entry/accrual-based accounting system, a Data Centre/



Warehouse and Disaster Recovery Centre will be established, along with the introduction of Business Intelligence framework. National Savings is also coming up with numerous Alternate Delivery Channels, like access of accounts by the investors through cellphone & internet, and introduction of debit cards for direct access to the ATM/POS network, and the 211k active agents of mobile banking, etc., which will act as cornerstone for achieving Financial Inclusion targets. The first region out of the total of 12 regions will cut-over by December 2017 with all the regions to be connected on-line by December 2018. National Savings is actively exploring the option of introducing the concept of virtual branches with scripless investment products/ schemes.

With enhanced distribution network of National Savings, there will be an opportunity to sell other products like Health and life (3<sup>rd</sup> Party) Insurance Policies, tying up with international remittance companies like western union and others to deliver the remittance to their customers and collection of utility bills etc. are also on the cards to be offered as part



Source: CDNS

of the package with the various schemes of National Savings. The eventual idea is to convert the NSCs into Community Centers, given the customer profile of National Savings and the way NSCs are currently been used by the investors.

The narrative to create new meaning to the products/ schemes of National Savings is critical; for example, prize bonds could be used as gifts on various ceremonies/ events; Defense Saving Certificates as investment for kids' education, wedding;

Behbood as a gift for aged/retired parents, etc. The campaign on these lines has already been launched and has been taken very well by the market. For inculcating Savings Culture

among the masses, World Savings Day 2016 was celebrated for the first time in the organization's history and the video message of the Director General on the initiative taken by National Savings to promote financial inclusion and restructuring of the organization was aired at the International World Savings Day conference in Jakarta. As for the future plans of product offering during 2017-18, keeping in view the customer profile, National Savings is coming up with innovative products in order to increase financial inclusion of small savers and unbanked population and

to contribute towards the Social Safety net of deserving segments of the society. With respect to this, Finance Minister has announced of extension the Bahbood Savings Certificates to the Disabled Persons and the launch of Shuhadas'

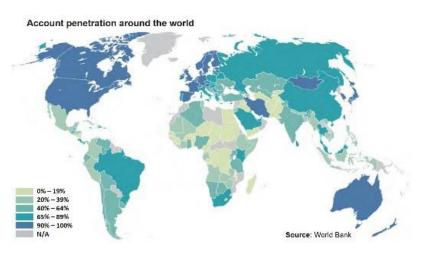


Family Welfare Accounts for family members of the martyrs, in the recent budget speech. Overseas Pakistanis Certificates/ Bond, an exclusive scheme for non-resident Pakistanis, are under active consideration. Shariah products

are taking firm roots in Pakistani society and National Savings is cognizant of the fact and working on the possibility of launching a much demanded Shariah Compliant Savings Certificates. To ensure sustainability of the above reforms, this

is realised at the highest level in the Government that it's imperative that National Savings be given autonomy and converted into a corporation. The process of corporatization is well underway as mentioned earlier.

Having said that the role of local banking industry, mutual funds and stock market players in promoting savings culture in Pakistan remains the most important element, particularly given the footprint and



the presence of these institutions and their contribution into the Country's GDP. The account penetration of Pakistan is too low at 16% as oppose to its peers. This poses a significant opportunity for the financial sector in Pakistan as over whelming number of potential account holders are up for grabs. This may require some policy changes which should be initiated by the financial sector through their respective fora and regulators.

The good news is that "the cat is in the bag" for this most misunderstood organization - National Savings; however, the financial sector and capital market players still have to put their act together to meet the larger national objective of promoting savings.

## 13. Plow Savings - Creating Safety Net and Financial Inclusion

## The News International, 26th October 2016

Savings play an integral role in promoting economic development and ensuring social welfare in any economy. Social security, in the form and shape of National Savings instruments, is the most important alternate available, particularly in the developing countries like Pakistan, in the absence of formal social security set-up.

Recent findings in the field of 'behavioral economics', provide interesting insights into the saving behavior in developing countries. They find that individuals, rich and poor alike, have self-control and inconsistency problems. The present thinking on savings, particularly by the poor section of the society, presupposes that they are risk averse and prone to shocks, and that security, liquidity and the accessibility, are important determinants of savings. This means that the Government sponsored saving schemes become even more important and critical. All saving determinants are inherently available in the products of National Savings in Pakistan; additionally, a consistent and secured stream of income are a true blessing and act as a safety net for the specific section of the society, like retired employees, etc. Investment in National Saving instruments are the best endowments, as access to a safe place to save and build assets is as important, if not more, as access to loans.

In the context of National Savings offering as a safety net, another important section of the society is Women. World Banking knows from its research that women are inherent savers. Women play an accepted and expected role in the household as money managers, juggling day to day needs while making sure that compulsory expenses like school fees are paid and health emergencies are covered. Although their incomes are low and unpredictable per se, they, however, manage to save on an average 10 to 15 percent of their income. Due primarily to lack of awareness, 95% of adult women don't own bank account in Pakistan and are forced to save informally in unreliable ways: at home in a drawer, by buying excess stocks for their businesses or in neighborhood saving clubs. I urge that our women must resort on most secured instruments of National Savings.

The social impact and contribution of National Savings Organization in Pakistan (Central Directorate of National Savings) is indeed phenomenal and we stand committed to this very cause. The reform process in National Savings is well underway and we aim to offer best in class service to our esteemed customers. National Savings has a typical set of customers who are extremely demanding, as asking for a client's trust with hard-earned savings is an inherently different proposition than offering a business loan; hence, requiring a different set of skills in a specialized institution like National Savings which is currently providing services to 7 million customers with over Rs.3.3 trillion investment portfolios.

Moving-ahead, we believe that cultivating further savings will promote financial inclusion which is all about delivering financial services at affordable costs, particularly to the sections of disadvantaged and low-income segments of the society. According to Brookings Institute's recent study, until few years back, Pakistan had among the lowest levels of formal financial services adoption in developing countries; however, the country's increasing mobile capacity levels (particularly with respect to 45% unique subscriber-ship and 3G/4G network coverage), combined with a robust mobile

money ecosystem, have helped to advance financial inclusion. The agent network experienced growth as well, with over 200,000 and growing, across the Country.

Riding on the back of substantially improved technology and physical infrastructure, National Savings intend to enhance financial inclusion through it's under construction technology platform. A large majority in Pakistan are outside the formal banking system, with merely 13% financial accounts ownership amongst adults. The policy of financial inclusion sets out to remedy this by making available a basic banking 'no frills' account either with nil or very minimum balances as well as charges that would make such accounts accessible to vast sections of the population for thrift. The banks in Pakistan are looking at these accounts from a pure credit perspective. Instead, they should step-up and look at this from the point of view of meeting the huge unmet saving needs, which are almost entirely addressed by National Savings presently.

Mobile wallet is the offering that is the need of the hour and National Savings is heading towards this direction as part of its financial inclusion initiative. National Savings will capitalize on the already available biometric verification system in the country for opening and maintaining accounts and offering top-notch service to its clientele. The envisaged mobile financial services platform will be interoperable with banking accounts which enables ATMs, POS Machines and interbank funds transfer functions through mobile wallets.

The fact is that there're supply-side constraints to attract further savings in the system. Pakistan's Savings to GDP Ratio at 14.6% is half of the average of other countries in the Region. This is primarily owed to lack of technology, product diversity and consumer/ investor education.

On this important day of World Savings, we would like to assure the nation that all these aspects are being worked on a war-footing basis with the full support and commitment of the Ministry of Finance. The National Savings Organization is pursuing an aggressive reform agenda - new products being rolled-out, integrating into the national clearing system, introducing/ upgrading technology platform, etc. - to promote financial inclusion by cultivating savings and providing a vast net of social security across the Country, for all and sundry alike. You will inshallah witness a substantial change in the way the working of your organization within the next 12 months.

At the end, I would very sincerely like to thank all our most esteemed customers for patronizing National Savings. Me and my team is committed to extending best in class service to them now and in future.

## 14. Cyber Crime: Role of Regulators and Government Institutions

## The News International, 3<sup>rd</sup> December 2018

Cyber-crime is a reality and exceeding with mushrooming fintech and increasing integration/ intra- operability. Various 2018 predictions about the merging of cyber and traditional financial crimes may actually prove too conservative, as in the recent past. Cyber attacks and cyber crimes will continue to grow. The nexus between this activity and money laundering/ terrorist financing is also likely to increase. There're three major factors driving the convergence of financial & cyber-crimes: (a) Proliferation of technology in Banking where more banking transactions will shift to digital and most channels fall beyond the control of a secure single banking environment. Cyber-security shall remain foremost among the priorities with companies locked-in an arms-race to stay-ahead of (or even catch up to) highly sophisticated cyber-criminals; (b) Limited digital and process awareness across FIs which is exploited by tech savvy criminals to breach through without organizations realizing the larger impact of such breaches; and (c) The speed that technology provides to do bigger fraud in less time, provides an attractive target with large paydays for criminals to focus on this. Traditional frauds, therefore, are dying fast and are being replaced by more sophisticated cyber frauds. However, there's no escaping from fintech due to greater customer demand for technology-driven solutions, and the fact that manual system or hybrid-system (automated but not digitized) is more vulnerable to the risk of frauds than the digitized system. Undisputedly, the fraud detection ability improves with the digitized system.

Like any other financial frauds, risk of cyber-crime can merely be mitigated but may not be plugged fully. To mitigate the risk of cybercrime, the regulators, particularly SBP, SECP and Government institutions having direct interaction/exposure with the customers like FBR and National Savings, are required to play the foremost role to protect the interest of the customer. The regulators must play a due role to ensure that these frauds are fully mitigated and if these frauds do occur then customer must be addressed first in a most convenient and smooth way, and the whole issue resolution shall be made more efficient and customer-friendly.

At the tactical level, therefore, from a regulators' standpoint, we have to look at larger perspective, and here I would suggest my 5C Theory for the regulators and the government institutions as follow:

I. Central Cybersecurity Command: (i) Regulatory & supervisory initiatives should be established under SBP and SECP (both together or independently) responsible to set the framework from identification, protection, detection, response and recovery efforts linked to Cyber-crimes. Guidelines issued by BIS in this regard are very helpful. (ii) They must realize that cyber event occurs merely based on an "attempt" — there is no requirement that there will be an actual compromise or financial loss. Early detection of fraud is the key to mitigate the extent of the loss. (iii) There's a need to clarify the rationale for regulation, particularly for the unregulated businesses. While Pakistan's banking sector is relatively sophisticated and broadly accepts the need for anti-money laundering regulation, the SECP-regulated sector encompasses a broad range of various businesses, and their job is must more complex and complicated. To address this, the SECP could provide typologies of how the services of various businesses it supervises can be abused by money- launderers. (iv) A more real time approach to analyzing data and other information (for example on consumer complaints) to support risk assessments, review exercises and market transaction monitoring is an absolute must;

- II. Competency Buildup Initiatives: (i) To incentivize training of ethical hackers, CISOs and security personnel, supported by Hackatons and cyber-exercises competitions to expand from talent to skilled resources. Many senior executives aren't fully fluent in what digital is, and much less are up to the speed on the ways it can change how their businesses operate or the competitive context. (ii) Companies must create digital academies to help educate its leadership about relevant digital trends and technologies and to provide a forum where executives could ask questions and talk with their peers. The financial-services provider jump-start things by holding a series of war-gaming workshops. (iii) The operating systems shall be audited and made robust and the guidelines in this respect must come from the regulators. In audit and inspection teams of SBP and SECP, there shall be system experts. While businesses are moving-ahead quickly with AI, NGOs and regulators, on the other hand, are far behind when it comes to talent and capabilities needed. RBI, for example, launched in 2014 a detailed IT examination programme to cover all banks, and set-up Cyber Security Labs across the country to assists IT examiners in conducting analysis of cyber security of the banks. The RBI also operationalized its IT subsidiary - the Reserve Bank Information Technology (ReBIT). The mandate for ReBIT, among others, is to focus on issues around IT systems and cyber security (including related research) of the financial sector and to also assist in the audit and assessment of the entities regulated by RBI;
- III. Cooperation & Collaboration: (i) Create an ecosystem of third-part suppliers to build consistent standards and structures. Supported by central supervisory initiatives, this could aid with Cyber- Events reporting to combined penetration testing to save costs. This should include not only FIs but also 3rd Party Service Providers like Cloud Service Providers for FIs. (ii) Mindset and cultural, issues among the FIs to share information must change. There shall be serious penalties and actions taken in case the FIs don't abide by the contract of secrecy amongst themselves. (iii) Collaboration with other central banks and institutions across the globe. An association (maybe at the SAARC level) may be developed across the region to share their experiences and initiatives/ infrastructure to mitigate the risk of cybercrime. (iv) Dissemination of typologies is most useful to mitigate cybercrime. The FMU's analysis could be used not only to disseminate intelligence products to law enforcement agencies, but also to provide feedback to the private sector. In particular, sharing typologies of moneylaundering activity with the private sector could help the latter better understand higher-risk activities. (v) Displacement effects must be looked at and targeted. There is a perception among people that as regulated businesses step-up AML efforts, the Government (specifically, the law enforcement agencies) needs to act in order to minimize the displacement of money-laundering activities towards unlicensed hawala/hundi operators;
- IV. Communication & Coordination: (i) There shall be wider publication of enforcement statistics. There seems to be a widespread perception that SBP and SECP have stepped-up anti-money laundering enforcement after the US regulator fined HBL in August 2017. However, no enforcement statistics such as the amount of fines levied are currently available. The publication of enforcement actions could reinforce the need for banks and non-banking businesses to take compliance seriously. It would also be beneficial for broadcasting to international partners, show- casing Pakistan's efforts to strengthen its response to money laundering and terrorist financing. (ii) Greater collaboration between in-house groups within the institutions will certainly be beneficial. With customers to institutional staff around baseline security and guarantees around financial transactions, for instance. Regular "war-games" for crisis communication in the case of cyber-crimes is becoming critical to have unified response and abilities to manage the scenarios which also gives confidence to the market to build

resilience. The collaboration within financial institutions between anti-money-laundering compliance teams, cyber security teams and other units involved in identifying and mitigating cyber-related risks. (iii) The fraud and compliance functions need to come together and take a holistic approach to people, processes and solutions they use. There're blurring lines between cyber and financial crime. (iv) Digitalisation may disadvantage older and other vulnerable consumers who have limited access to, or understanding of, digital delivery channels as fintech carries the potential for increasing the financial inclusion of some groups of consumers while at the same time excluding others which could only be handled through better communication and coordination and above all customer service. (v) From its side, the SBP and SECP could use the Consultative Forum, including FBR, National Savings and Law Enforcement Agencies, to encourage a conversation among financial institutions and other entities involved in fintech eco-system on money-laundering risks they face, such as higher-risk industries or indicators of suspicious activity; and

V. Centralized Monitoring Command Systems: (i) At FIs to help prevent and detect financial crime. FIs need both an integrated (and timely) data set and the ability to bring sophisticated analytics focused on quality of data, Big Data analysis & visualization techniques to bear on the data to generate useful insights which allow time to react. Although tax crimes are included within the scope of predicate offenses, banks and other regulated businesses view tax evasion as less serious compared to other type of crimes. A clear message from the regulator regarding the importance of detection and reporting of untaxed funds would be useful. Reporting businesses would also benefit from typologies of tax evasion, in particular in order to effectively deal with cash-intensive businesses that are likely to pose higher risks of tax evasion. Here the involvement and interest of FBR is the key. (ii) SBP and SECP must come out with some minimum cyber security guidelines for the banks and until and unless those guidelines are met, they shall not be allowed to launch digital banking in a big way. A National Cyber Coordination Centre has been established in India and RBI also has set up an Expert Panel on IT Examination and Cyber Security drawing representatives from the industry as members. The Panel provides assistance in IT examination/cyber security initiatives of banks, review examination reports and suggest actionable items. Several countries have taken steps to improve their cyber resilience - the Committee on Payments and Market Infrastructures and Board of the International Organization of Securities Commissions (IOSCO) have issued Guidance on cyber resilience for financial market infrastructures in June 2016 after consultation with stakeholders, Financial Policy Committee (FPC) of the Bank of England launched the CBEST initiative - a Vulnerability Testing Framework. On the request of FPC, Her Majesty's Treasury and the regulators worked with the core of the UK financial system and its infrastructure to put in place a programme of work to improve and test resilience to cyber-attack. The FPC also noted that it was important for the boards of financial firms and infrastructure providers recognize their responsibility for responding to those attacks. Recently, Hong Kong Monetary Authority launched a Cyber security Fortification Initiative (CFI). The CFI mainly comprises following three pillars: (a) Cyber Resilience Assessment Framework; (b) Professional Development Programme; and (c) Cyber Intelligence Sharing Platform. The Institute for Development & Research in Banking Technology (IDRBT) under RBI released a comprehensive check-list on cyber security prepared by a panel of experts drawn from industry and academia in July 2016. The checklist covers wide-ranging aspects of cyber security like enterprise control, IT infrastructure security, endpoint security, security monitoring as also outsourcing security. Similar initiatives are required to be taken in Pakistan by the regulators and the Government Institutions.

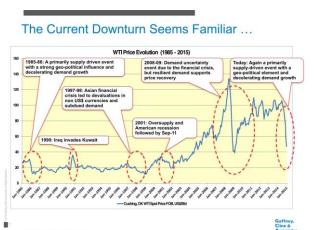
On our part as community, as we move-ahead in the cyber world, we have to Confront Ignorance (no choice but to embrace technology); Confront Fear (of unknown); Confront Guesswork (educate ourselves); and Confront Diffusion (transformation to digitization). Resource allocation at the macro/ regulatory level (and perhaps at the micro level) are the key in winning the fight against this changing world. In other words, "Regulatory Burden" whereby regulators must look for ways to expand the resources available for the battle against financial crime, and there shall be right professionals available to assist them with these matters. I must acknowledge and thank Mr. Jamal Hashmi for all his research and analysis which helped me coming out with the above write-up on this very important and unappreciated topic.

## 15. Oil Price Prognosis - Global Politics and Economics

#### Business Recorder, 6th March 2016

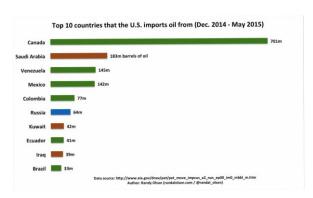
Predicting the oil prices is a hundred million dollar question; in literal sense, it's a game of billions of dollars. This is one of the most difficult tasks, given that there're too many variables and moving parts on the economic, and more so, on the political fronts. Market punters are not willing to take a view for longer tenors and quote forward rates for larger volumes beyond 2/3 months. The recent phenomenon is surely more political than otherwise.

The similar situation was witnessed almost 30-years back, in 1985-86 when there was over-supply situation whilst



volatility in future.

Whatever the case maybe, the fact of the matter is that the oil price movement is largely dependent on the global politics. This is also a fact that the US is driving the world politics, and their future actions will drive where the prices will settle. The dependence of USA on the middle eastern,



Slippery slope WTI oil price World oil supply \$ per harrel m b/d 120 100 98 100 80 96 60 94 40 92 20 90 0 — .... 2013 14 15 16 Sources: EIA; Thomson Reuters

demand, and

Source: EIA, Bloombera

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hence prices, remained subdued. The meaningful difference this time round, however, is the enhanced world storage capacity availability - 85 million tons. Therefore, as a side note, the storage in the oil sector remains the single biggest business opportunity for the investors, particularly in Pakistan, as that would determine the energy security levels and dependence on the international oil supplies and the price



more specifically Saudi, oil is minimal - merely 16%. This was all achieved in a very strategic way in the last decade by the administration of USA - imposing ban on exports, focusing on indigenous E&P activities (shale, case in point) and enhancing the storage capacities. Resultantly, in 2010-11, the total indigenous production over took the imports which stands at over 60% now.

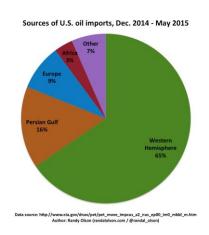
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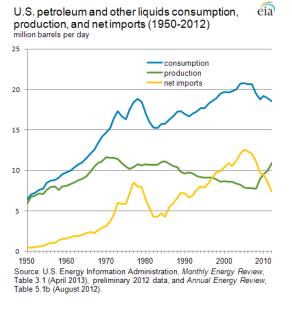
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This development helped USA in driving the global foreign policy more effectively and efficiently; more importantly without violence. In this back-drop, will try and assess, in the write-up, where the oil prices are likely to settle in 2016 and beyond. The fact is that the elections in USA will also play a major role in driving the world politics and; therefore, the international oil prices. This is very obvious that the two main competing parties for the White House have very divergent strategies to handle the world politics -



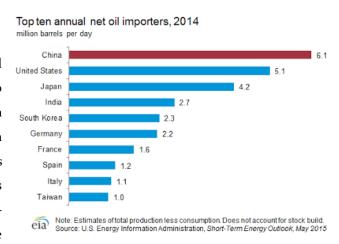




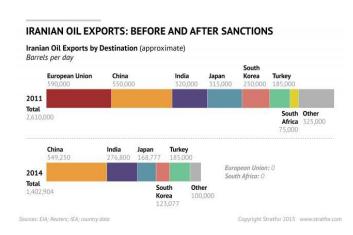
driven. The results of surveys towards elections at the end of the year will be key in this context. USA has enough cash reserves and economic & financial strength to withstand any losses in the interim, until the oil prices settles down to their advantage, to ensure that they

keep a good balance between the level of oil prices and the global politics.

On the international political front, Iran is playing ball and toeing the line of the west. President Rouhani's strategy to mend-fences with the west, and to open-up the Iranian economy, seem to having gotten formal endorsement from the Iranian public, as witnessed in the most recent elections in Iran. This strategy is coming in the backdrop of Iran's desperation to get integrated in the international market-place. Despite provocations by Saudi Arabia, in the



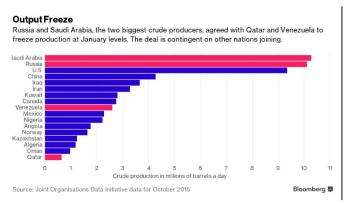
aftermath of Sheikh Nimr's execution and the attack on Saudi Embassy in Tehran, Iranian administration handled the situation very well. Thus, it helped in keeping the temperature low in the middle eastern politics. Iran had been strolling cautiously in the current environment and would never like to rock the boat with the west, particularly USA, at this stage.



On the other hand, the fate of OPEC and its influence on the oil prices is hanging in balance. OPEC, particularly Saudi Arabia and Russia, surely exerting pressure for the cut in the output; however, Iran remains the loose cannon in the whole equation. This is Iran's much awaited opportunity to grab the larger market share, particularly, from Saudi Arabia due to traditional economic and political reasons, which they have been losing out on for the longest time due to broad based sanctions. Iran surely has the location advantage, as at least four out of

the five largest global importers of oil have closer geographic proximity with Iran than any other middle eastern exporter.

OPEC also don't want to reduce the output as they could result in the risk of fall in OPEC's market share, hence influence on the international oil prices, especially Saudi Arabia losing out to Iran, if Iran decides to go down its own way, which has very strong likelihood. Under this situation, the best option for OPEC was to decide on freezing output at the existing levels with the possibility that any further storage will either not be available or further storage will become so costly that it would not be



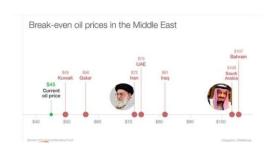
feasible for the countries to store any further. Therefore, that would result in the gap between supply and demand to squeeze, and gradually there will be a happy medium. This is not a bad strategy, under the given circumstances, but still need to be tested. In this strategy, the action of Iran and USA still remains the key.

USA has already lifted ban on the export of their oil after a decade. This decision is hanging as Sword of Damocles on the main oil exporting countries, currently at the receiving end, basically Saudi Arabia and Russia - as that could mean that USA can pump in oil in the international market and determined the international oil prices at their discretion. This aspect reinforces the hypothesis above that USA is managing the world politics thru the oil prices. Interestingly enough, USA has not just achieved the reduced dependence on the middle eastern oil but has gone to another extent whereby USA can supply the oil in the international market to control the oil prices and thus control the international, middle eastern politics.

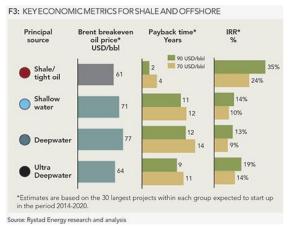
On the other hand, Russia in the recent times have suffered big time, due to the significant decline in oil prices, which of course, kept Russia in check for taking any extreme action in the Middle East vis a vis Syrian conflict. The Russian Ruble has devalued more than 27% in the last 10/12 year. This is probably the highest devaluation that any country has faced in this prevailing oil price volatility.

Russia and Saudi Arabia have kind of formed a block in OPEC to control the output. However, hitherto, this duet has not been successful in making a dent on the prices, as such. The most important aspect is the fiscal deficit levels of

Saudi Arabia, which was 21.6% last year and is budgeted for 15% in 2016. However, given the realities on the ground and the prevailing odds, it's estimated that the fiscal deficit will settle between 17.5% and 20%. This is despite the new taxes been introduced and the planned Privatization of Aramco and the Airports. The most concerning fact is that in order to meet the fiscal deficit of Saudi Arabia, the oil prices must be over \$100 per bbl. This is a very significant number and will act as a drain on the



already under-pressure cash reserves of Saudi Arabia, which stand in the range of \$625bn, drained by around \$150bn in the last year alone. This is indeed a very significant development in the overall scheme of things, and in the context of middle eastern politics.

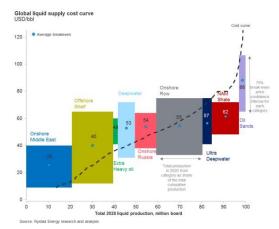


Given the above dynamics and to assess where the oil prices are likely to set-in, one need to understand the pricing of the sources from where USA is meeting its energy needs. There're two main oil sources for USA - Shale and Canada. More so Shale than Canadian Oil Sands actually, as most of the energy needs of USA are met through indigenous sources, which will become more so in future by design, where Shale stands way more important, and most promising, given the quantum energy requirements of USA. If one look deeper into the E&P costing of these two sources, some revealing facts come to light which may help in assessing where the

international oil prices settle in 2016.According to Rystad Energy & Analysis, the average E&P cost in Canada which is predominantly Oil Sands based is around \$88 per bbl whilst the E&P cost of Shale is \$62 per bbl. The average E&P cost of onshore middle eastern oil is around \$25 per bbl. If one takes into account the IRR of these E&P sources then the average break-even/ comparable cost of E&P works out to be \$40-45 per bbl. This is the price at which the international oil prices should settle down in 2016, barring if anything radical happens in the run-up to the USA's

Presidential elections. Coincidentally, my assessment is in-line with oil futures market, which is quoting, as of February 29th 2016, a future rate of \$40.54 by the year-end, albeit at low volumes. As I said earlier, taking a position on the future oil prices with so many unknowns is a highly risky proposition for the market players; hence, low trading volumes.

The oil prices may start picking up further in 2017 and onwards; however, that would all still, of course, depends on too many moving parts, in particular how the international politics pan out, available room in the global storage capacities, penetration/acceptance of Iran in the international markets, to mention a few factors.



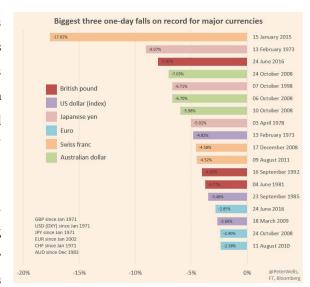
These're most interesting times, and the projections on oil prices above are happened to be in complete contradiction with many analysts across the globe, including the World Bank. However, let's see how things shape-up, eventually.

## 16. Brexit Implications and Impact on Pakistan Economy

## The News International, 30th June 2016

Brexit is indeed once in a life time event. These sorts of situations arise in eons, and the impact of them is always unsettling. This is exactly the way the world has reacted to Brexit which surely is not a surprise, albeit a bit harsh and over-reaction vis a vis UK. In order to assess how this historic move, hit close to home, we need to appreciate the whole phenomenon and dynamics of the EU and the possible thinking of the UK voters.

Brexit decision is not all that sentimental alone as its been perceived; there's perhaps an element of logic and thinking behind it, if we look at it dispassionately. The fact is that the older population in UK has seen how the law and order was compromised and the economy suffered due to immigration



pressure and financially supporting the inefficient members of EU. It's very evident that UK was more been on the receiving-end than otherwise. Having said that whatever the logic and thinking maybe, this sort of enormous decision

Age Group Med		Remain	Leave	Life Expectancy	Average number of years they have to live with the decision	
18-24	21	64%	24%	90	69 52 31	
25-49	37	45%	39%	89		
50-64	57	35%	49%	88		
65+	73	33%	58%	89	16	

Life Expectancy based on CNS pension planner life expectancy estimator
Average 65 - year old was estimated to be 73 using CNS age distribution data
Those who were undecided or wouldn't say have been escluded

referendur

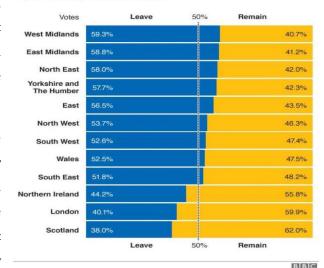
Those who must live with result of the EU referendum the longest want to remain.

The impact could be deep and far-reaching on EU and its existence; hence, also on all the trading partners of EU, including Pakistan. There're various dimensions to it - short term vs long term and after-effects of this decision within and outside Britain and EU, both in terms of economy and on the society as a whole.

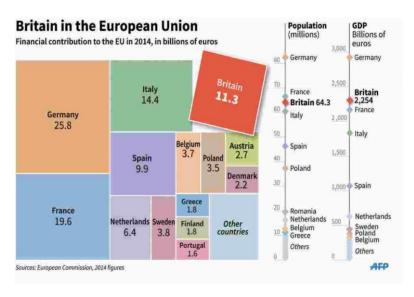
While there're a host of unknowns at this point, but given the fundamentals and the ground realities, UK seem to be better off at the end, and even in the short run, if Scotland (and Ireland) sticks around, which they probably would, given the choices between UK and EU. The way things will pane-out with UK and EU over the next few months would possibly change the "emotions" of Scots and Irish, which are perhaps

must have been taken with 2/3rd majority; not with the simple majority of merely 1.2mn votes in a population of 65 million, less than 2%. This is ludicrous for such a serious decision to impact the lives of over 500 million people directly and pretty much the entire globe indirectly. This debacle indicts the Cameron Government.

#### How Leave won the referendum



all charged at this point. Things are likely to simmer down in due course and sanity will prevail. Concluding that Scots wants to go with EU based on the referendum results is unfair. The dynamics of their earlier referendum to stay in UK were very different than the realities on the ground now and going-forward post Brexit.



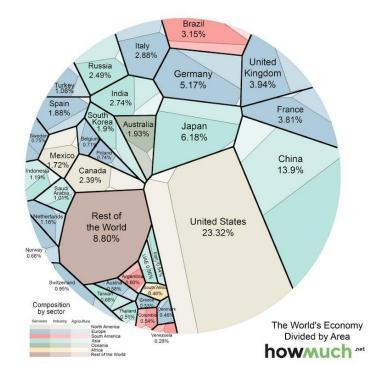
Brexit is the beginning of the end of protectionism and unnatural alliances. There's an overall change in the mindset and the way economies work. Public sector spending in infrastructure and aggressive fiscal & structural reforms (monetary policy as a tool has been largely exhausted) will be the name of the game. These can't be escaped any further for the struggling economies of EU. Reforms in EU and the EU beneficiary countries is inevitable; otherwise, there may be more exits, or at least pressure from the people in the receiving countries to exit, which could have serious

political and economic ramifications. Some fundamental soul-searching and structural adjustments are on the cards across the globe, particularly in the EU. Brexit will force the European Union to embark on the path of reforms on which they have been dragging their feet for a while. These're defining moments for us and the various economies globally.

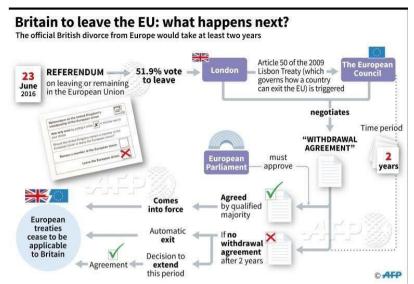
In the immediate future, there will be extremely situations - currencies tumbling, markets precipitating, world trade

and investment getting impacted, as we have witnessed hitherto. In medium to long term, however, things will eventually get settled, if only Britain leaves. Extended impacts are dependent on how the other counties in EU react - will they also decide to leave, particularly the larger economies like Germany, France and possible Netherlands. If they do decide to leave then we could see things getting worst; in fact, the very existence of EU will be challenged and hence the troubling economies - PIGS (Portugal, Italy, Greece, Spain), etc. - will suffer more.

The fact is that services sector contributes 78% of the UK GDP. With English speaking population (not the possibility with other EU Countries except for a couple of them), the



relocation of this industry elsewhere in toto within EU is almost impossible. Therefore, UK economy will remain by and large insulted from any economic shocks with the Brexit. Banks, and the other service industries, may shift some part of

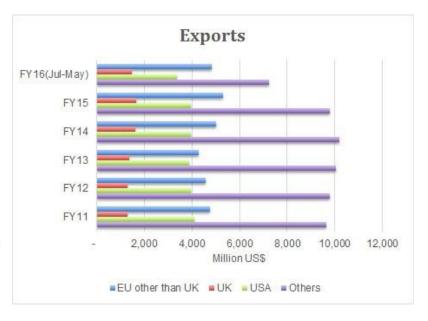


their businesses which is specific to the rest of the Europe; moving full operations is highly unlikely and impractical. Once the detailed analysis (regulatory framework, HR availability, language, logistics, etc) are done, they probably decide otherwise. importantly, who knows if France (or Germany or Netherlands) is/ are the next to exit EU? Too early for the FIs to announce their intentions to relocate. The relocation may happen due to other reasons, like strict compliance requirements in UK, etc., but not Brexit, as such.

The other angle is socio-economic. There will be divided societies, across Europe including UK, which could possibly lead to social unrest, particular in the troubling economies with mounting pressure from immigrant and lesser funding

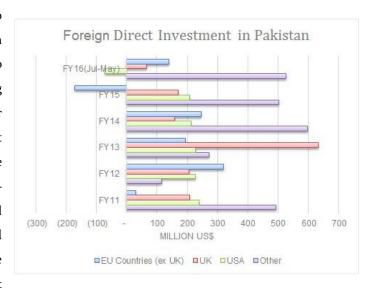
support due to exit(s). The long and short of it is that there will be a crisis in medium to long run depending on how the other large economies of Europe react.

In the immediate future, with Britain leaving, the suffering could be painful but those shall settle-in eventually maybe in the next 5-10 year. A lot depends on how and when Britain will actually leave - the transition could be smooth and in the mutual interest of all, if managed properly and consciously, keeping egos aside during the exit negotiations. The exit plan is to be agreed between UK and EU



Countries, post triggering of Article 50 of the Lisbon Treaty, is the most critical aspect in the overall scheme of things, post referendum. In the benefit of all parties concerned, the exit shall be a long and slow process, as abrupt cutting of strings would do more harm than help; in fact, if at all, that may not be practically possible. One thing is very important to sink in that the various treaties, particularly related to trade and business; between UK and the rest of the European Countries could continue as is, irrespective of UK's status as the formal member of the EU. The arrangements on border may; however, tightened to control the free flow of immigrants in UK. Given the above thesis, let's see how Pakistan will get impacted with this earth-shattering event. While the good news is that Pakistan may not get substantially impacted. However, there're a few susceptibilities that Pakistan need to be mindful of and be prepared to ride the storm. As a matter of fact, Brexit may offer some opportunities to Pakistan. In this context, following are the important areas:

1) Exports - big exposure in low quality products to Europe (almost a quarter of the total exports, other than UK), primarily textiles. Post GSP+ status, the exports to EU, including UK, increased by around 23%. Remaining EU is the single largest block in terms of exports for Pakistan. As EU go through the transition phase, post Brexit, exports could get impacted negatively due to the risk of recession and consumerism which are understrain already in EU. The Brexit specific incremental affect may not happen immediately, as been argued above, but this is something which Pakistan need to be prepared for. This is the single biggest risk that

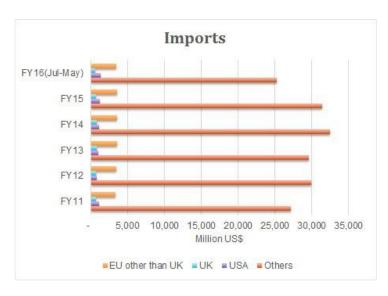


Pakistan's exposed to vis a vis Brexit. The exports of UK (alone around 8%) are relatively high value- added and those will remain immune to any possible shocks. In fact, this maybe a good opportunity for us to increase our market share in UK. The imports from EU and UK, on the other hand, are not significant; therefore, supply risk is non-existent;

2) Worker Remittances: UK contributes almost 20% of the total remittances into Pakistan, while rest of the EU is merely 3% of the total worker remittances. UK is indeed a significant market for Pakistan. There may be a blip in the short run, as people will be consolidating their positions/ exposures due to uncertainties

Worker's Remittance										
87						Million USD				
	FY11	FY12	FY13	FY14	FY15	FY16				
						(Jul-May)				
EU (ex UK)	235	245	247	327	271	511				
UK	1,200	1,521	1,946	2,180	2,376	2,270				
USA	2,069	2,334	2,186	2,468	2,703	2,249				
Others	6,356	7,966	8,500	9,872	12,352	12,026				
Total	9,859	12,067	12,879	14,847	17,702	17,056				

around; however, in the medium term there shall be an opportunity to get a better market share from UK as the European migrant pressure subside, particularly in the white-collar, or maybe in the pink-collar, jobs, including Doctors, Lawyers, Pharmacist, and the other service industry related professionals. The white-collar jobs may also be up for grabs in EU, but for that language skills will be the key. We need to treat worker remittances as an industry and start gearing

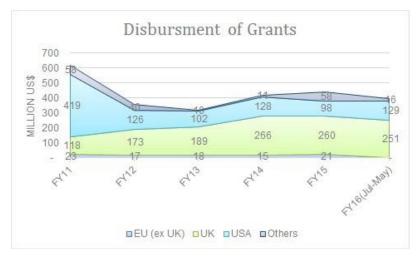


ourselves up to capture the opportunities across the world. We need to work closely with the interior and manpower ministries of the counties, where there's an aging population concern, like EU Countries, to figure out the way to ensure that the requisite skills are imparted in our exportable workers and above all compliance clearance screening process to be made robust to address the growing concerns for the workers coming out of Pakistan. This can be argued that the compliance concerns may be mitigated when the white-collar jobs are targeted. Worker

remittances are getting more and more important for our economy and coming close to our export numbers already;

- 3) FDI: There has been an erratic trend on this front. In any case, the trend in the recent past, for the last three years, has been more focused towards getting FDI from China reached over 75% (increased from 21% in FY'13) of the total FDI. This is not a very healthy trend given the risk of single country exposure. The share of China in FDI will continue to remain strong due to their commitment to CPEC, and as the other destinations like Europe and Middle East will remain in a consolidation mode. Therefore, on this constituency, the Brexit will not impact much;
- 4) Grants: UK is a significant player in this arena (60%+ contributor); an amount of over \$260 million and growing. Most importantly, this aspect has qualitative value;

any hit in this respect may not be the best thing for Pakistan's already grappling profile, perception. This area may also get under pressure for a while due to cautious approach by the granting/ aiding agencies in UK. We need to make sure that at the diplomatic level, we shall engage ourselves with the UK authorities to ensure non-impairment; and, last but not the least, 5) Social Impact and Law & Order: it's possible that the marginal economies in Europe come hard on the



immigrants, mainly Muslims, with UK quota of immigrants shrinking. The pressure to accommodate immigrates on the remaining EU Countries will increase and could resultant in extreme reactions, which could trigger law and order challenges. Consequently, the Muslim world, along with Pakistan, will get further isolated. Hence visa issues, trading constraints, etc., etc. This will also hurt the exports, remittances, and the economy as a whole.

All in all, Pakistan maybe a sufferer in this situation on the export's fronts, in the long run. Our exports need to find more stable and growing markets like USA and parts of Asia which are markets of high value-added products. In the extended time horizon, UK offer more opportunities to us than threat. We need to position ourselves to capitalize on these opportunities. Remaining Europe may not be good news. Its future is uncertain to say the least and possess risk for the external account, if we continue to depend on our export destinations in Europe. We need to address our structural issues to make our exports competitive, harness remittances and improve perception issues by going after the opportunities proactively to explore, capitalize on new high-premium, quality conscious, stable, international markets. CPEC delivery and success, in this context, will become even important than before. To reiterate and conclude, there may not be an immediate severe fall-out on Pakistan; however, there're real vulnerabilities out there over a period of time, particularly on the foreign inflows, in the form of exports, grants, worker remittances, FDIs, etc., which need to be plugged-in through proactive policy decision making and diplomatic actions.

## 17. Local Natural Gas - Immediate Solution to Power Crisis

#### Daily Dawn, 1st September 2014

Power crises and its viable solutions have been extensively debated in the recent past. Energy experts have differing views on this critical issue, and I have added my views to this important debate which surely requires quick action. While suggesting any solution, one needs to keep affordability (costing/ pricing) and availability (net thermal efficiency/ usage) of resources/ electricity in view. There are no quick fixes to this problem at hand but surely some options could help in addressing this issue quicker than others. The quantum of the issue is so large (demand-supply deficit of 6000-7000 MWs and growing) that the solution has to be such that it would address this deficit adequately, e.g., Alternate Energy Fuels - Wind, Solar, Waste-to-Energy, Run-of-the-River, etc. - could be a supplemental fuels but can't possibly be the main fuels to address this large gap.

That leaves Coal, Natural Gas, and Water, as possibly the most viable options. Pakistan's extremely blessed to have abundance of Coal, Natural Gas and Water resources, and all these could very well be the main fuels at different points of time, now and in future. However, in short to medium term, contrary to the popular belief about Coal, Natural Gas is the most viable fuel to address this large power deficit in the quickest possible way at the most affordable costs/ pricing. The typical lead time for setting-up coal-based power plants is 4-5 years, and building medium-sized dams is 7-10 years, whilst a gas-based power project could be converted into 9-12 months, or even earlier, on an already producing field/ mine. It's important to mention that the conversion of existing Residual Fuel Oil ("RFO") based power plants to Coal, maybe the quickest solution to the problem (15-18 months gestation period), but it has a glass ceiling of 3000-3500 MWs.

Given estimated 66+ Trillion Cubic Feet of explored and unexplored gas reserves in Pakistan, the availability of Natural Gas for power can easily address the current deficit. It can also contribute substantially towards the future energy needs thru rationing of the existing resources and better Exploration and Production ("E&P") activities.

The existing rationing of the supply of Natural Gas to CNG and the subsidized industries like Fertilizer could in itself take care of the existing power deficit to a large extent in the shortest possible time. The complete diversion is neither possible nor practical; however, progress has been made in this direction and more is desired by gradually withdrawing subsidies and encouraging these two industries to switch completely to the fuels like LNG over the next 3 years.

Another area which needs rationing is Domestic Consumers (second largest user of Natural Gas - north of 18%). This segment needs to be diverted away from Natural Gas usage to Power and/ or Solar, particularly for domestic heating. The new large real estate projects should not be allocated gas or electricity. They need to find their own power generation solutions, ideally solar or wherever possible wind. Solar driven domestic heating initiatives to be made mandatory for all the future requirement. There shall be fiscal benefits, both in the forms of taxation and concessional credit, for encouraging utilization of solar as the fuel.

E&P activities have been lackluster in the last few years largely due to security concerns in the oil & gas rich territories, as well as unattractive well-head prices. Additional domestic gas production is surely a way to reduce the deficit and the cost of power generation. The (indicative) supply curve for domestic gas in Pakistan shows that 85% of domestic gas costs Pakistan less than \$5/mmbtu. On the other hand, the cost of RFO and LNG is about three times this level. The

Weighted Average Cost of Gas ("WACOG") for domestic gas is in the range of \$3.2/mmbtu which is why Pakistan is able to have such low retail prices of gas. The WACOG level indicates how low domestic gas prices are in Pakistan where not all of the gas potential has been realized as yet. Therefore, it is critical that Pakistan gives higher priority to further domestic gas production.

The Petroleum Policy 2012 offer prices which are considered adequate by the E&P industry and also allow E&P companies to apply for conversion of their existing fields to the 2012 policy prices. This can bring fresh investment to the upstream gas sector and, if guided carefully, more gas can be brought into the system in the coming 12/36 months. Even if further domestic gas comes in at the \$6/mmbtu offered under the 2012 Policy, it will be much cheaper than any imported fuel, which is actually \$20/mmbtu. This would mean that the power to the eventual consumers will be available at an estimated cost of \$0.08/Rs.8 per KwH which is more than half the current tariff levels. Hence, this becomes the most viable solution to the problem, both in- terms of affordability and availability, in the shortest possible time-frame. This may require laying of distribution infrastructure for connectivity of these power plants to the grid, which could be achieved within 24-36 Months and must be pursued, simultaneously.

Stated above is a solution to address the immediate power shortages for which the estimated timeline is 1-3 years. For the medium term (4-6 years), Coal, particularly that which is locally mined. The long term (7 year and beyond) solution vests in hydro power projects. To achieve a proper fuel-mix, alternate fuels to the extent of say 1/4th of that, is an absolute essential from the long-term energy security perspective. This can be achieved at the lowest possible costs which should not cross single digit ever.

This thesis makes the argument for consolidated Energy Ministry (merger of Ministry of Water & Power and Ministry of Petroleum & Natural Resources) more cogent.

I must emphasize that the above discussion is merely one piece of the equation to achieve the most affordable, long-term sustainable energy supply in the Country. Solution to the second piece - Transmission and Distribution - is equally important which I would like to cover in my next article.

## 18. Pakistan Power Sector Agenda: Issues and Solutions of T&D Sub-Sector

Business Recorder, 14th October 2014

Pakistan has been faced with power crises and its multiplier effect on the economy for decades. This issue has been reviewed extensively and many options have been debated by experts at private and governmental level. I would like to add my views to this important debate which surely requires quick action. In order to have a coherent and meaningful debate on this subject, it's critical to divide this topic into two distinct parts - transmission and distribution (T&D or Discos), and generation. While T&D could be further divided into two parts but for the purpose of discussions in this write-up, this would be discussed in tandem/together. Part 1 of this article will cover the issues in T&D and their possible solutions whilst Part 2 will discuss the solutions for the challenges on the generation front.

The most interesting fact is that the predominant reason for load shedding has been shifted from the conventional shortfall of most viable/economical generation capacity to the ability of T&D, basically Discos, to carry more than 15000 MW at a given point in time to the end consumers. Not that the constraints of generation capacity have disappeared, and hence this shift, but it's just that these deficits have been overtaken by the impediments of T&D - in 2008, ~11% of the electricity load-shedding was attributable to the bottlenecks at the level of Discos, as opposed to ~65% in 2014, as per the data provided by NTDC.

Solutions for the two divisions are very different given, of course, the distinct nature of the two businesses. The solution to take care of the generation is a bit more complex and strategic/long-term in nature; while the issues of Discos are more operational/managerial in nature and are fixable in the short to medium term. The element of large funding requirement, however, in both the cases, is common.

The primary requirement in T&D is to fix the structural and the management issues which could be pursued in two stages/phases. In the first stage, there's serious need to take these entities out of the clutches of NTDC, undertake certain structural changes, and provide them independence in terms of management and operations. Practically housing all these entities under NTDC, albeit administratively, makes the whole business of NTDC ungovernable, which not only has to supervise the operations of these entities but also have to work on the future expansion of the network and manage CPPA loop at the other end of the power chain. Government's objective to cross-subsidise the unviable entities with the viable ones and do equal load-shedding in all Discos, need to be addressed in the first-place for these entities to move-forward and deliver. This structural road-block has to disappear when there will be an independent/empowered Board of Directors and the CEO in each of these nine entities who run these entities independently with full authority/autonomy to hire/fire people, make commercial calls, plug-in collections/leakages across the board, and take decisions in the best interest of their respective territories. The mandate of the Board and the CEO shall be to get the best professionals from the market and does the management/operational restructuring necessary to turn these entities around into financially viable/profitable businesses. We have the example of successful banking sector turnaround in three years from the second term of the Nawaz Sharif Government. Similar sort of resolve and commitment is required in case of turning around the T&D Sector in Pakistan now. This is important to note that for the CEOs of these entities, power sector experience is good to have only. They basically require good/competent manager/administrator with full authority to make difficult decisions really. The financial sector had a unique advantage of very strong regulatory environment. Like SBP, Nepra is a strong regulator but it's much younger in age and is in the process of evolution. There's genuine need of capacity building in NEPRA like rest of the power sector. There may be certain pieces of regulations which may need to be tightened to ensure full success and benefits for the masses, post-privatisation of the Discos. Fixing of financials (audit, etc.) and/or any other issues, including property title documentation, etc., which turned out to be an issue in extracting/securing the full amount/payment in the privatisation of PTCL, have to be addressed on priority. Any necessary regulation and financials/property related matters have to be sorted out/rolled out in this first stage of restructuring only.

The process of revamping and expansion of the network must continue, simultaneously, for which the Government has to allocate the most necessary funding and tap into the funding pool available out there with the multilaterals globally. The collections process must also be pursued without any exception by introducing innovative ideas/ tried & tested solutions in the other Discos in Pakistan and in the region (collection outsourcing in troubled areas, etc.) and the state-of-the-art-technology (smart-metering, etc.)

In the second stage, privatisation needs to be pursued. There must be "tailor-made solution" for each entity; "one-size-fits all strategy" won't work. Every Disco has its own unique features and specific issues; generic or overlapping items/ issues will be very few. For example: the solution required for FESCO (Faisalabad) will be very different from TESCO (Tribal Areas), given only the uniqueness of cultures in the two areas. The process of privatisation remains the key and must be handled in the most professional and transparent way. There was an option for the government/Privatisation Commission to follow thru on the privatisation of these Discos by either offering each DISCO once at a time or as part of a cluster of one or two. Both strategies have had its pros and cons which should have been further evaluated and finalised once the restructuring exercise was completed. However, the Government/ Privatisation Commission seem to have taken a decision on it already and the chosen process is much on its way. Now, the Privatisation Commission has to ensure active participation from interested parties thru specific Roadshows in selected countries/regions, particularly China (and other Asian countries), Turkey, Saudi Arabia, the UAE, Qatar, London, USA, etc, on a one-on-one investor basis. Only direct selling will ensure maximum extraction of value.

I must re-emphasise that the above discussion is merely one piece of the equation to achieve the most affordable, long-term sustainable energy supply in the country. Solution to the second piece - Generation - is equally important, if not more, and will be discussed in Part 2 of this article.

While suggesting any solution on the generation front, one need to keep affordability (costing/ pricing) and availability (net thermal efficiency/ usage) of resources/ electricity in view. There are no quick fixes to this problem at hand but surely some options could help in addressing this issue quicker than the others. The quantum of the issue is so large (demand-supply deficit of 6000-7000 MW and growing) that the solution has to be such that it would address this deficit adequately, eg, Alternate Energy Fuels - Wind, Solar, Waste-to-Energy, Run-of-the-River, etc - could be one of the supplemental fuels but can't possibly be the main fuels to address this large gap. These fuels are essentially long-term solutions (12 years and beyond) and will always be limited in scale due to capacity utilisation/technology.

The viability/cost-effectiveness of the other alternate fuels could be discussed in this write-up but for the time being, I would like to confine myself to Solar alone, as there has been a considerable debate about Solar as being electricity/

power solution recently. There are three main impediments vis-a-vis Solar - 1) can't be used on a scale basis (limited supply possible to the grid); 2) the capacity utilisation is very low - below 40% - verses 80% plus in Gas and Coal; and more so 3) this is an expensive solution in the medium to immediate long term - eg, the levelled tariff in the 12-years for solar is 17/18 cents, which means that it goes beyond 22 cents in the initial years and then starts falling down.

The dynamics of other alternate fuels can also be seen in the similar context with slight variation in numbers. Solar, however, is indeed a fantastic off-grid solution for domestic heating like geysers, tube- wells, street lights, schools, colleges, etc. Basically, all those places where the utilisation is either during the day or limited for few hours with the battery support (longer and high-capacity battery requirement are not the most realisable). But more so on those items which are power-guzzlers. For the upper and the upper-middle class households, it may be a good solution, given that it requires initial high investment costs plus changes in wiring and appliances capacitors, etc.

That essentially leaves Coal, Natural Gas, and Water, as possibly the most viable options. Pakistan's extremely blessed to have abundance of Coal, Natural Gas and Water resources, and all these could very well be the main fuels at different points of time, now and in future. However, in short to medium term, contrary to the popular belief about Coal, Natural Gas is the most viable fuel to address this large power deficit in the quickest possible way at the most affordable costs/pricing. The typical lead time for setting up coal-based power plants is 4-5 years, and building medium-sized dams is 7-10 years, whilst a gas-based power project could be converted into 9-12 months, or even earlier, on an already producing field/mine. It's important to mention that the conversion of existing Diesel/Residual Fuel Oil (RFO) based power plants to coal, may be the quickest solution to the problem (15-18 months gestation period), but it has a glass ceiling of 3000-3500 MW.

Given total estimated 66+ Trillion Cubit Feet (TCF) of explored and unexplored gas reserves in Pakistan: existing reserves are ~29 TCF whilst our annual utilisation is ~4 BCF. The unexplored reserves are estimated to be in the vicinity of ~37 TCF. This is pretty sizeable and that's onshore only. We have huge opportunities offshore and, of course, Shale Gas which is an expensive source of exploration and must be taken in at a later stage. The availability of natural gas for power, therefore, can easily address the current deficit. It can also contribute substantially towards the future energy needs thru rationing of the existing resources and better Exploration and Production (E&P) activities.

The existing rationing of the supply of Natural Gas to CNG and the subsidised industries like Fertiliser could in itself take care of the existing power deficit to a large extent in the shortest possible time. The complete diversion is neither possible nor practical; however, progress has been made in this direction and more is desired by gradually withdrawing subsidies and encouraging these two industries to switch completely to the fuels like LNG over the next 3 years.

Another area which needs rationing is domestic consumers (second largest user of natural gas - north of 18%). This segment needs to be diverted away from natural gas usage to power and/or solar, particularly for domestic heating. The new large real estate projects should not be allocated gas or electricity. They need to find their own power generation solutions, ideally solar or wherever possible wind. Solar-driven domestic heating initiatives to be made mandatory for all the future requirement. There shall be fiscal benefits, both in the forms of taxation and concessional credit, for encouraging utilisation of solar as the fuel.

E&P activities have been lackluster in the last few years largely due to security concerns in the oil and gas rich territories, as well as unattractive wellhead prices. Additional domestic gas production is surely a way to reduce the deficit and the cost of power generation. The (indicative) supply curve for domestic gas in Pakistan shows that 85% of domestic gas costs Pakistan less than \$5/mmbtu. On the other hand, the cost of RFO and LNG is about three times this level. The Weighted Average Cost of Gas (WACOG) for domestic gas is in the range of \$3.2/mmbtu which is why Pakistan is able to have such low retail prices of gas. The WACOG level indicates how low domestic gas prices are in Pakistan where not all of the gas potential has been realised as yet. Therefore, it is critical that Pakistan gives higher priority to further domestic gas production.

Albeit a room for improvement, the Petroleum Policy 2012 offered prices, which also allows E&P companies to apply for conversion of their existing fields to this policy prices, maybe considered adequate by the E&P industry for the time being. This can bring fresh investment to the upstream gas sector and, if guided carefully, more gas can be brought into the system in the coming 12/36 months. Even if further domestic gas comes in at the \$6/mmbtu offered under the 2012 Policy, it will be much cheaper than any imported fuel, which is actually \$20/mmbtu. This would mean that the power to the eventual consumers will be available at an estimated cost of \$0.08/Rs 8 per KwH, which is more than half the current tariff levels. Hence, domestic natural gas becomes the most viable solution to the problem, both in terms of affordability and availability, in the shortest possible timeframe. This may require laying of distribution infrastructure for connectivity of these power plants to the grid, which could be achieved within 24-36 months and must be pursued, simultaneously.

Stated above is a solution to address the immediate power shortages for which the estimated timeline is 1-3 years. For the medium-term (4-6 years), coal, particularly that which is locally mined. The long-term (7 year and beyond) solution vests in hydropower projects. To achieve a proper fuel mix, alternate fuels to the extent of say 1/4th of that, is an absolute essential from the long-term energy security perspective. This can be achieved at the lowest possible costs which should not cross single digit ever.

This thesis makes the argument for consolidated Energy Ministry (merger of Ministry of Water and Power and Ministry of Petroleum & Natural Resources) more cogent. There seemed to be divergent priorities/views of the two Ministries for example, the allocation of natural gas to power sector is low on the priority list of the MoP&NR, while it is, and should be, top of the MoW&P priority order. The resolution of the circular debt issue can also be best managed and resolved, if the two ministries are consolidated

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