

## CIRCULAR DEBT IMPACT ON POWER SECTOR INVESTMENT

1. This note (i) defines the term “circular debt” which is commonly used in connection with the Pakistan power sector and what the main causes of it are; (ii) provides an analysis of circular debt as at the end of December 2013 in terms of receivables owed to, payable owed by and government subsidies and other support provided to the power sector; and (iii) briefly discusses the impact of circular debt on private sector investment into the power sector when it reaches critically high levels as seen in 2008 and 2013.

### I Circular Debt

2. **Common Definition.** In Pakistan circular debt and similar terms such as “cross-indebtedness” and “liquidity issue” are often used interchangeably, not precisely defined and sometimes mistakenly thought to describe condition that does not have a beginning or end – or cause and effect. Broadly circular debt describes the amount of payments held back by an entity having cash flow problems from suppliers and creditors, so that it can push its cash flow problems down to other segments of the supply chain. In connection to the Pakistan power sector, circular debt is the cash flow shortfall incurred by the sector with the Central Power Purchasing Agency (CPPA) at its center.<sup>1</sup>

3. The power sector’s circular debt problem occurs when there is a chronic shortfall between **inflows** from:

- collections of electricity sales by regional power distribution companies (DISCOs) from private sector customers and from federal, provincial and local government customers; and
- tariff differential subsidies (TDS) claimed by the DISCOs and K-Electric<sup>2</sup> against the government to cover the difference between the tariff charged to customers and the cost-recovery tariff determined by National Electric Power Regulatory Authority (NEPRA)<sup>3</sup>

and **outflows**:

- directly to public sector thermal power generation companies (GENCOs), independent power producers (IPPs), and the Water the Power Development Authority (WAPDA) Hydel for the supply of electricity; and
- indirectly to suppliers of primary energy<sup>4</sup> and spare parts to GENCOs and IPPs.

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<sup>1</sup> As a part of overall energy sector reforms in 2007 the Water and Power Development Authority (WAPDA) was unbundled. WAPDA was made responsible for water and hydropower development while the Pakistan Electric Power Company was made responsible for the unbundling process and subsequent management of nine corporatized regional power distribution companies (DISCOs), four government-owned thermal power generation companies (GENCOs) and the National Transmission Dispatch Company. The reforms also called for the establishment of the Central Power Purchase Agency to act as a separate clearing agent for all trade in electricity, in a move toward creating a single buyer purchasing power from IPPs and GENCOs, and selling to DISCOs.

<sup>2</sup> Formally known as Karachi Electric Supply Company, K-Electric Limited is listed on the Karachi, Lahore and Islamabad stock exchanges and is the distribution, transmission and generation licensee in the Karachi area.

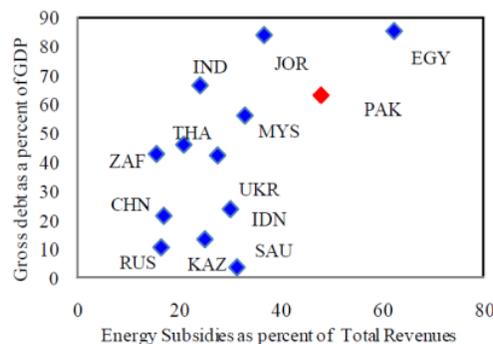
<sup>3</sup> More precisely TDS paid to consumers is the difference between the tariff determined by National Electric Power Regulatory Authority and what is finally notified by the government.

<sup>4</sup> These include oil and gas exploration companies (OGDCL and PPL), oil refineries (ARL, Parco), and distribution companies in gas (SNGPL, SSGC) and oil (PSO, Shell).

4. Under the normal circumstances these inflows and outflows should be in balance. Most outflows are fairly predictable due to their contractual nature.<sup>5</sup> But inflows are very uncertain, for example due to the delay or non-payment of claimed TDS from the government. For short-term imbalances CPPA, DISCOs, GENCOs, K-Electric and IPPs addressed this by (i) using cash reserves, (ii) drawing down working capital lines with banks, and or (iii) increasing payables owed to suppliers. However, circular debt reached critically high levels in 2008 and 2013.<sup>6</sup> This had far reaching implications for the economy which included the following:

- (i) Payment arrears to suppliers of critically needed primary energy and replacement parts used to generate electricity, causing GENCOs and IPPs to operate well below capacity;
- (ii) Cash reserves of DISCOs, GENCOS and IPPs fell to critically low levels resulting in operational inefficiencies;
- (iii) Use of captive power by larger industrial units and smaller generators by households and retailers which are costly, inefficient, environmentally unsound;
- (iv) Commercial banks being unable to provide additional working capital and longer-term loans because of their over exposure to the sector;<sup>7</sup>
- (v) Private sector investors and their financiers becoming concerned about increased exposure of government guarantees that underpin the creditworthiness of power purchase agreements with IPPs, resulting in reduced long-term investment in generation as well as exploration, refining, and other parts of broader energy sector;
- (vi) Public debt increasing sharply to fund liquidity support and subsidies, resulting in a high debt burden when compared to other countries (Charts 1 and 2);<sup>8</sup> and
- (vii) The increase in the demand-supply gap to 5,000 megawatts in 2013, which has resulted in a reduction potential gross domestic product (GDP) growth of the country.

**Chart 1: Energy Subsidies and Government Debt Burden**



Source: IMF, Fiscal Monitor, April 2013

<sup>5</sup> A possible exception to this is the unhedged cost of imported primary energy, which is subject to international market conditions and movements in foreign exchange rates.

<sup>6</sup> In June 2006, DISCOs and other public sector power companies started borrowing from banks against government guarantee to raise working capital due to the non-receipt of tariff differential subsidies from government.

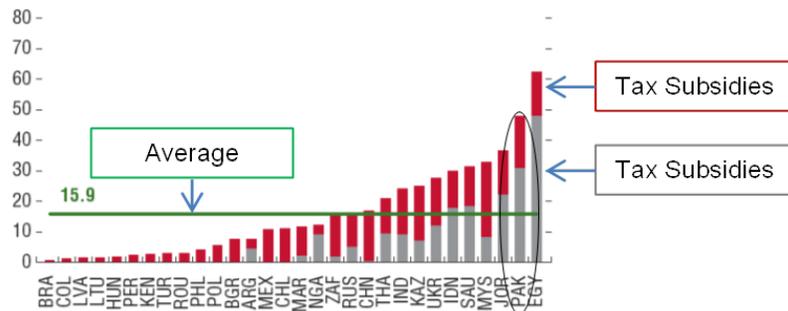
<sup>7</sup> Bank exposure to the energy sector increased from 7.8 percent in FY09, to 12.3 percent as of March 2013.

<sup>8</sup> According to the State Bank of Pakistan Annual Report 2013, untargeted energy subsidies were responsible for the persistently large fiscal deficits in the past several years and around one-third of the total increase in domestic debt in the past two years can be directly traced to these subsidies alone.

<http://www.sbp.org.pk/reports/annual/arFY13/Debt.pdf>

<http://www.imf.org/external/pubs/ft/fm/2013/01/pdf/fm1301.pdf>

**Chart 2: Energy Subsidies in Emerging Market Economies**  
(Percentage of Total Revenue)



CHN = People's Republic of China, EGY = Egypt, IDN = Indonesia, IND = Indonesia, JOR = Jordan, KAZ = Kazakhstan, MYS = Malaysia, PAK = Pakistan, RUS = Russia, SAU = Saudi Arabia, THA = Thailand, ZAF = South Africa.  
Source: IMF, Fiscal Monitor, April, 2013

5. **Main Causes.** The main causes of circular debt periodically reaching critically high levels are well documented<sup>9,10,11</sup> and include;

- (i) poor revenue collection by the DISCOs from private sector and government customers,
- (ii) delayed and incomplete TDS payment by the government to DISCOs and K-Electric,
- (iii) weak governance,<sup>12</sup>
- (iv) delays in tariff determination by the National Electric Power Regulatory Authority (NEPRA) compounded by delay in notification by the government,<sup>13</sup>
- (v) a fuel price methodology that delays the flow of cash into the sector,
- (vi) prolonged stays on fuel price adjustments granted by the courts, and
- (vii) transmission and distribution loss improvements that cannot be achieved based on the regulator's tariff targets.

<sup>9</sup> Pakistan Power Sector Circular Debt Report: The Causes and Impact of Circular Debt. Produced by the Planning Commission of Pakistan and funded by United States Agency for International Development. March 2013 [http://www.pc.gov.pk/hot%20links/2013/Final\\_USAID-Pakistan%20Circular%20Debt%20Report-Printed%20Mar%202025,%202013.pdf](http://www.pc.gov.pk/hot%20links/2013/Final_USAID-Pakistan%20Circular%20Debt%20Report-Printed%20Mar%202025,%202013.pdf)

<sup>10</sup> Syed Sajid Ali and Sadia Badar , *Dynamics of Circular Debt in Pakistan and Its Resolution*, The Lahore Journal of Economics, September 2011. <http://www.lahoreschoolofeconomics.edu.pk/JOURNAL/LJE%2015,%20SE/04%20Syed%20Sajid%20EDITED%20TTC%2011-10-10.pdf>

<sup>11</sup> <http://www.sbp.org.pk/reports/annual/arFY13/Energy.pdf>

<sup>12</sup> Government also appoints the Board of Directors of the DISCOs, and political and bureaucratic factors continue to limit Board independence and technical and management competency. At the corporate level, Board authority and efficacy in monitoring and enforcing the performance of DISCO management has been insufficient to improve performance.

<sup>13</sup> Federal government notified a uniform tariff for all DISCOs whereas the NEPRA determines tariff for each DISCO. After the Supreme Court judgment in 2013, NEPRA is the only authority that can notify tariffs. To keep the uniform tariff, government informs NEPRA of the subsidy rate for each category of customers for each DISCO and NEPRA notifies the with subsidies rate in addition to the determined tariff.

## II Current Situation

6. **Receivables.** Receivables owed to DISCOs increased by 142% from end June 2008 to end December 2013 to PRs480.7 billion. Amounts owed by private sector customers grew by nearly 400% during this period, and totaled PRs288.4 billion or 60% of receivables at end December 2013. This disproportionate growth rate can in part be attributed to poor collections, but it may also be due to private sector customers reaching an elasticity point whereby they are more willing to delay or not pay for electricity because of recent large tariff increases and or dissatisfaction with service provided.

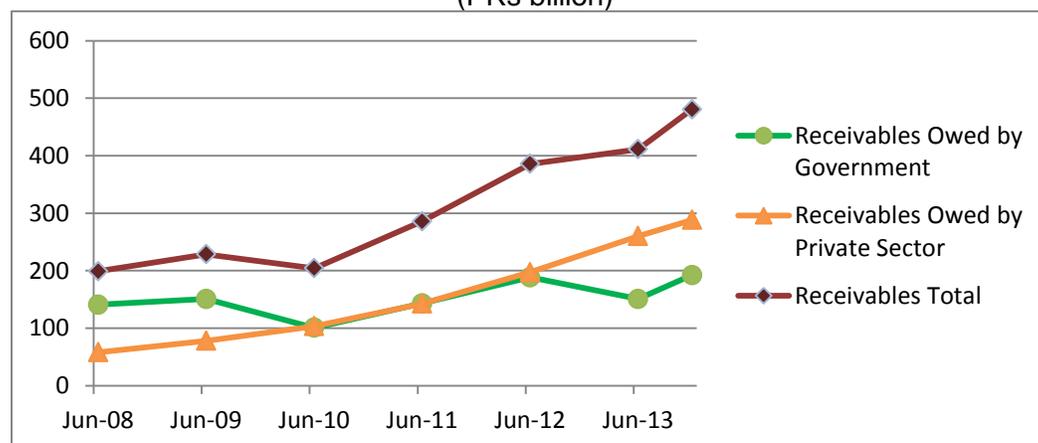
7. The second largest amount is owed by provincial governments, which increased by 833% during this period to PRs81.9 billion, although as a percentage of receivables this amount is relatively small at 17%. The amount owed by FATA at end December 2013 was PRs28.5 billion or 6% of receivables. This is substantially lower than the amount owed in 2009 due to the federal government paying off FATA's outstanding bills in 2010, but is again trending up and if looked at from a starting point of PRs6.1 billion at end June 2010, it has grown by PRs22.4 billion or 368%.

**Table 1: Receivables Owed to DISCOs**  
(PRs billion)

RECEIVABLES	Jun-08	Jun-09	Jun-10	Jun-11	Jun-12	Jun-13	Dec-13
Federal Govt.	2.6	2.9	5.1	7.1	6.3	4.6	8.2
AJ&K Govt.	1.2	2.4	4.4	9.9	15.9	24.0	31.5
FATA	74.2	84.4	6.1	10.4	23.8	20.3	28.5
Agri. Baluchistan	3.5	6.4	9.9	6.2	3.1	1.2	8.3
KESC	50.5	38.6	42.7	40.9	54.7	26.8	34.0
Provincial Govt.	8.7	15.9	32.6	68.7	84.5	74.0	81.9
<b>Receivables Owed by Government</b>	<b>140.8</b>	<b>150.7</b>	<b>100.7</b>	<b>143.1</b>	<b>188.3</b>	<b>150.9</b>	<b>192.3</b>
<b>Receivables Owed by Private Sector</b>	<b>58.0</b>	<b>77.8</b>	<b>103.4</b>	<b>142.7</b>	<b>197.3</b>	<b>260.1</b>	<b>288.4</b>
<b>Total Receivables Owed</b>	<b>198.8</b>	<b>228.6</b>	<b>204.2</b>	<b>285.8</b>	<b>385.6</b>	<b>411.0</b>	<b>480.7</b>

Source: Pakistan Ministry of Finance and Central Power Purchasing Agency.

**Chart 3: Receivables Owed by Government and Private Sector**  
(PRs billion)

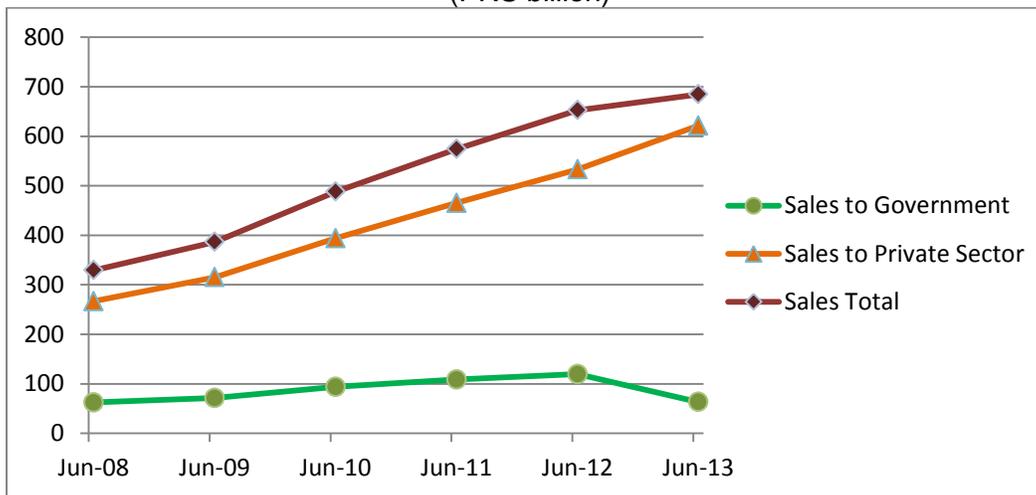


Source: Pakistan Ministry of Finance and Central Power Purchasing Agency.

8. A 'Days Sales Outstanding' or DSO analysis estimates that the average collection period for receivables owed to all DISCOs and their ability to manage accounts receivables, by dividing

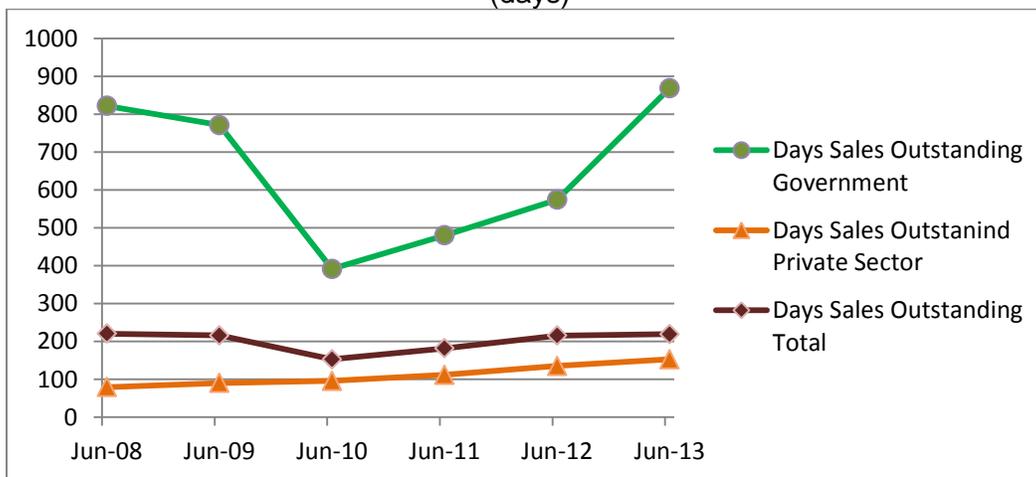
receivables by annual sales by 365 days. This highlights that (i) the government as a customer takes a very long time to pay, from a low of 391 days in 2010 to a high of 869 days in 2013, and (ii) while the private sector is much faster to pay, the number of days it takes for the DISCOS to collect has nearly doubled from 79 days in 2008 to 153 days in 2013 (Chart 5). Again, this may show that private sector customers reaching a point whereby they are more willing to delay or not pay for electricity and or collection efforts have weakened.

**Chart 4: Electricity Sales to Government and Private Sector**  
(PRS billion)



Source: Pakistan Ministry of Finance and Central Power Purchasing Agency.

**Chart 5: Days Sales Outstanding**  
(days)



Source: Pakistan Ministry of Finance and Central Power Purchasing Agency.

9. **Tariff differential owed to DISCOs and K-Electric.** The annual amount of TDS actually released by the government to DISCOs and K-Electric increased by 225% from 2008 to 2013, and amounted to PRs334 billion or 1.46% of GDP in 2013, while the amount of TDS claimed by DISCOs and K-Electric against the government increased by 518% and amounted to PRs416 billion or 1.81% of GDP in 2013. It is also noteworthy that on a cumulative basis for 2008 to 2013 plus the half year to end December 2013, TDS released to DISCOs and K-Electric totaled

PRs1,249 billion, claimed was PRs1,503 billion and unpaid (claimed less released) PRs254 billion.<sup>14</sup>

10. Looking at the half year to December 2013, TDS released to DISCOs and K-Electric was PRs152 billion<sup>15</sup> and claimed was PRs196 billion. If repeated for the second half of the year to June 2014, this would suggest that as compared to 2013 the amount of TDS claimed has stopped growing- and may indicate that the reforms and actions taken by the government under the National Power Policy 2013 and in agreement International Monetary Fund under the Extended Fund Facility (EFF) are starting to reduce the energy sector's burden on the annual state budget as a result of TDS and other losses underwritten by the government.

**Table 2: TDS and Other Subsidies Claimed, Released and Owed to DISCOs by Government**  
(PRs billion)

TARIFF & SUBSIDIES	Jun-08	Jun-09	Jun-10	Jun-11	Jun-12	Jun-13	Dec-13	TOTAL
TDS claimed by DISCOs	50.7	158.0	187.6	153.4	155.9	338.4	150.1	1,194.1
TDS released by MOF for DISCOs	87.0	82.0	93.5	245.8	99.3	250.1	127.0 <sup>a</sup>	984.6
<b>Outstanding TDS owed to DISCOs</b>	<b>-36.3</b>	<b>76.0</b>	<b>94.1</b>	<b>-92.5</b>	<b>56.7</b>	<b>88.4</b>	<b>23.1</b>	<b>209.5</b>
TDS claimed by K-Electric	16.6	25.0	33.3	44.0	66.7	77.3	45.7	308.6
TDS released by MOF for K-Electric	15.7	17.0	31.7	46.0	45.0	84.0	25.0	264.4
<b>Outstanding TDS owed to K-Electric</b>	<b>0.9</b>	<b>8.0</b>	<b>1.6</b>	<b>-2.0</b>	<b>21.7</b>	<b>-6.7</b>	<b>20.7</b>	<b>44.1</b>
<b>Total Subsidies Owed by Government (for the period)</b>	<b>-35.4</b>	<b>83.9</b>	<b>95.7</b>	<b>-94.4</b>	<b>78.4</b>	<b>81.7</b>	<b>43.8</b>	<b>253.6</b>
<b>Total Subsidies Owed by Government (cumulative)</b>	<b>-30.6</b>	<b>53.3</b>	<b>149.0</b>	<b>54.6</b>	<b>133.0</b>	<b>214.7</b>	<b>253.6</b>	<b>253.6</b>

<sup>a</sup>Of this amount, PRs50 billion was released by the government in January and February 2014.

Source: Pakistan Ministry of Finance and Central Power Purchasing Agency.

11. The Ministry of Finance has advised that outstanding TDS for 2008, 2009, 2010 and 2011 are still subject to audit by Auditor General of Pakistan and the cumulative amount of PRs41.3 billion for these years will be cleared after the conclusion of audit. PRs145 billion of outstanding TDS for 2012 and 2013 will be adjusted against non-cash settlement of PRs 138 billion.<sup>16</sup>

<sup>14</sup> TDS has often not paid on time or in full due to fiscal constraints, disputes and other factors, and appears to have been allocated on a "just-in-time" basis when the level of payables owed to suppliers reached critical levels. Subsidies provided to tubewell customers often resulted in lengthy disputes over payment between the DISCOs and provincial governments. Ministry of Finance is having the TDS claims by DISCOs audited for the years 2008 through-2011. After verification of the amounts by the auditor, TDS claims aggregating PR 41 billion are expected to be paid.

<sup>15</sup> PRs50 billion of TDS was released by the government in January and February 2014, but has been included in this analysis since it relates to TDS claims during the 6 month period.

<sup>16</sup> The newly elected government announced in May 2013 that it wanted to clear PRs503 billion of circular debt within 60 days. To do this the Ministry of Finance allocated PRs342 billion on 27 June 2013 to clear payables owed to IPPs, GENCOs, fuel suppliers and others. As a part of overall settlement PRs 23 billion which was payable to IPPs as liquidated damages were waived off by IPPs. Non-cash settlement was made for PRs138 billion against loans

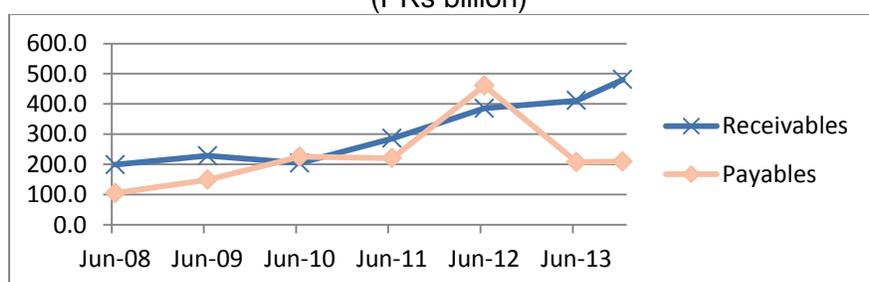
12. **Payable owed to suppliers.** The total amount owed by CPPA on behalf of DISCOs to suppliers of electricity (IPPs and WAPDA Hydel) and by GENCOs to primary energy suppliers of nearly doubled from PRs105.4 billion at end June 2008 to PRs209.6 billion at end December 2013. Amounts owed to IPPs grew by 127% during this period, and totaled PRs137.2 billion or 65% of payables at end December 2013. Amounts owed to oil suppliers had the largest change, increasing by over 450% to PRs54.4 billion or 26% of payables.

**Table 3: Payables Owed by PEPCO and Related Entities**  
(PRs billion)

Payables to:	Jun-08	Jun-09	Jun-10	Jun-11	Jun-12	Jun-13	Dec-13
WAPDA Hydel /NTDC/Others	29.0	46.8	53.8	69.1	106.0	122.1	14.3
IPPs	60.5	82.9	131.3	139.7	291.5	74.9	137.2
Oil	9.8	8.1	23.5	0.7	33.4	4.5	54.4
Gas	6.1	11.3	16.8	11.1	29.7	5.8	3.7
<b>Total Payables</b>	<b>105.4</b>	<b>149.1</b>	<b>225.5</b>	<b>220.6</b>	<b>460.7</b>	<b>207.4</b>	<b>209.6</b>

Source: Pakistan Ministry of Finance and Central Power Purchasing Agency.

**Chart 6: CPPA and Related Entities Receivable and Liabilities**  
(PRs billion)



Source: Pakistan Ministry of Finance and Central Power Purchasing Agency.

13. Closer analysis however of payables<sup>17</sup> over the past few years and on a month-by-month basis for the half year to end December 2013 suggests a more volatile story and that the level of receivables and payables have not moved in parallel as would normally be expected over time (Chart 6). Payables moved dramatically from PRs221 billion for 2011 to PRs461 billion for 2012 and then fell to PRs207 billion for 2013 and then PRs90 billion a month later at end July 2013. This was due to a PRs480 billion liquidity injection and non-cash settlement of intercompany dues in June and July 2013 by the government into the power sector.<sup>18</sup> For the six month to end December 2013 payables are again accumulating at a slower rate compared to before the tariff increase in August and October but still a rapid rate, increasing from PRs90 billion at end July 2013 to nearly PRs210 billion at end December 2013 or 132%. This PRs119

and other liabilities owed by WAPDA, GENCOs and nuclear power plants to government against the payables of power purchases in July 2013.

<sup>17</sup> The total amount of payables owed CPPA on behalf of DISCOs to suppliers of electricity and by GENCOs to primary energy suppliers is often used as a simple measure of the size of the circular debt. But this does not measure the full extent of the circular debt since it does not reflect the impact of receivables owed to DISCOs in excess of what they would normally carry.

<sup>18</sup> The newly elected government announced in May 2013 that it wanted to clear PRs503 billion of circular debt within 60 days. To do this the Ministry of Finance allocated PRs342 billion on 27 June 2013 to clear payables owed to IPPs, GENCOs, fuel suppliers and others. As a part of overall settlement PRs 23 billion which was payable to IPPs as liquidated damages were waived off by IPPs. Non-cash settlement was made for PRs138 billion against loans and other liabilities owed by WAPDA, GENCOs and nuclear power plants to government against the payables of power purchases in July 2013.

billion increase may be partly due to a PRs40 billion increase in receivables, PRs47 billion of unpaid TDS for the half year and seasonable factors.

14. **GOP liquidity support to the power sector.** From 2008 to 2013 the government directly or indirectly through Power Holding (Private) Limited (PHPL)<sup>19</sup> converted into public debt amounts owed by GENCOs, NTDC, CPPA, DISCOs and other power sector entities to banks and other creditors as a result of their need to fund circular debt. The first transaction was made during the 2009 fiscal year when PRs226 billion was transferred to PHPL, the second transfer of PRs142 billion was made in 2012 and the third transfer of PRs 97 billion in 2013. Out of this debt PRs226 was converted into public debt through the swap of government securities in November 2011. An amount of PRs239 billion is still held by PHPL. In June 2013 government issued Pakistan Investment Bonds of PRs128 billion and exchanged them with creditors to clear circular debt in the system in addition to cash and book settlements.

**Table 4: GOP Liquidity Support to the Power Sector**  
(PRs billion)

	Jun-08	Jun-09	Jun-10	Jun-11	Jun-12	Jun-13	Dec-13	TOTAL
Loans assumed by government through PHPL which were converted into public debt in November 2011		226.0						226.0
Loans arranged by government through PHPL which are still on the balance sheet of the company					142.0	97.0		239.0
Issuance of Pakistan Investment Bonds for clearance circular debt in June 2013						128.0		128.0
<b>GOP Liquidity Support (for period)</b>	<b>0.0</b>	<b>226.0</b>	<b>0.0</b>	<b>0.0</b>	<b>142.0</b>	<b>225.0</b>	<b>0.0</b>	<b>593.0</b>
<b>GOP Liquidity Support (cumulative)</b>	<b>0.0</b>	<b>226.0</b>	<b>226.0</b>	<b>226.0</b>	<b>368.0</b>	<b>593.0</b>	<b>593.0</b>	<b>593.0</b>

Source: Ministry of Finance and Audited Financials of Power Holding (Private) Limited.

### III Circular Debt Impact on Private Sector Investment into the Power Sector

15. **Investment Demand** – In June 2012 electricity supply totaled 16,104 MW while peak demand totaled 22,622 MW, leaving a gap of 6,518 MW or some 40%.<sup>20</sup> This led to load shedding of up to 12 hours in urban areas and 18 to 20 hours in rural areas per day. The gap will get larger with electricity demand expected to grow by 5%–6% per year over the next 10 years, or by 32,000 MW by 2020.<sup>21</sup> To fill the current gap and to meet new demand from a growing economy in excess of 1,000 MW per annum, substantial investment is needed in

<sup>19</sup> This is a special purpose company under the Ministry of Water and Power, owned and guaranteed by the government, and formed in June 2009 to help remove bank debt owed by GENCOs, NTDC, CPPA, DISCOs and other power sector entities as a consequence of unpaid subsidies.

<sup>20</sup> For most of the year however the gap was 4,000 to 5,000 MW.

<sup>21</sup> State of the Industry Report 2012.

<http://www.nepra.org.pk/Publications/State%20of%20Industry%20Reports/State%20of%20Industry%20Report%202012.pdf>

brown- and green-field generating capacity;<sup>22</sup> conversion of oil based generation capacity to coal based generation to improve the fuel mix; power transmission and distribution networks; fuel exploration, importation, processing, and transportation; energy efficiency and plant rehabilitation. The Integrated Energy Sector Report and Plan 2010 estimated that this investment could amount to \$9.7 billion from the public sector and \$14.9 billion from the private sector.<sup>23</sup>

16. Such private sector investment could be forthcoming, provided that: (i) circular debt and the causes that make it reoccur are resolved; (ii) there is certainty the government will promptly honor its obligations under power purchase agreements, (iii) CPPA is seen as credible, transparent clearing agent for the trade in electricity; (iv) the corporate debt market is allowed to grow by eliminating distortions caused by higher guaranteed returns offered by government-operated national savings schemes; and (v) security issues can be resolved which particularly impact foreign direct investment.

17. **Investment Supply** - For equity investment, interest would come mainly from large local industrial groups, Middle East based investors and parties related to EPC contractors possibly from People's Republic of China (PRC) and to a lesser extent from the Republic of Korea (Korea) and other countries.

18. For the debt component, it is estimated that the local banking sector could contribute 30-40% of the total debt requirement, if the investments were spread out over time. The banks have liquidity, although it is largely being absorbed by government borrowing and government-operated national savings schemes which offer higher guaranteed returns, and project finance skills. The balance of financing for power projects using coal may come in the form of buyer credit provided by international banks with the backing of official export credit agencies and export-import banks (ECAs) mainly from the countries which have a large number of EPC contractors using coal technology, like PRC. For hydro, wind and other renewable energy projects, buyer credit backed by ECAs from Europe, Korea, PRC, and the United States of America (except for hydro power projects) might be expected.<sup>24</sup> However, considering the huge financing requirement for the power sector, private sector participants believe that government will need to (i) facilitate and spearhead a comprehensive strategy to mobilize private as well as public sector investment finance, and (ii) actively engage at the policy level with other governments which have the potential to support financing for power sector project through official ECA arrangements.

19. **Government guarantee and other credit support** – To attract private sector investment into the sector, government will need to be diligent and conscious in performance of its obligations under (i) indirect guarantees provided to IPPs under power purchase agreements between CPPA on behalf of DISCOs and IPPS and in the future GENCOs to be privatized, and (ii) direct debt payment guarantees to banks that support debt facilities provided to public sector enterprises like PHPL, Pakistan International Airlines and Pakistan Steel. Significant delays, at

<sup>22</sup> According to private sector estimates, the cost of this generation capacity will vary depending on the fuel used, with \$1.0 million per MW for gas, \$1.5 to 2.0 million per MW for coal, and \$2.5 million per MW plus for hydro and other renewables.

<sup>23</sup> Integrated Energy Sector Recovery Report and Plan, Friends of Democratic Pakistan (FODP) <http://www.adb.org/sites/default/files/pub/2010/energy-recovery-report-plan.pdf>

<sup>24</sup> As at 31 January 2014 Pakistan had a country risk rating of 7 (with 0 being the lowest risk and 7 being the highest) in accordance with the OECD Arrangement for Officially Supported Export Credits. This would require Participants that are willing support such buyer credits to charge the highest minimum premium. <http://www.oecd.org/tad/xcred/cre-crc-current-english.pdf>

times stretching to a period in excess of 90 days in case of direct debt payment guarantees, have been observed. Similarly, when government guarantees were called by IPPs on account of non-performance by power purchasers (CPPA on behalf of DISCOs), they were not honored and as a result a group of IPPs took the case to Supreme Court for adjudication. The case was settled out of court. Consequently, some banks may now question the certainty of government guarantees in either form when assessing new medium- to long term loans to power sector projects, the result of which could be higher pricing or more stringent terms or in the worst case no credit at all.

20. **Independent and transparent CPPA** - CPPA could help improve the climate for investment into the power sector if it (i) has decision making authority and capacity to act as clearing agent for all trade in electricity, (ii) is managed by private sector professionals who have the understanding of the power market and authority to make decisions free from political interference, (iii) has complete control over the cash flows which it receives from DISCOs and payments to GENCOs and IPPs, and (iv) there is a transparent and properly funded mechanism to manage cash flow gaps.

21. **Privatization of DISCOs and GENCOs** – The private sector is expecting privatization or a similar form of commercialization of viable DISCOs and GENCOs, which make up 52% of installed generation capacity, on a fast track basis. This will allow private sector investment to flow into these companies which is needed initially to improve collections, reduce distribution, and transmission line losses, and improve efficiency. A clear privatization timeline from government is needed to allow the DISCOs and GENCOs to properly plan funding from the market for future working capital and capital expenditure, as well as retain and or hire market oriented, motivated and skilled management and technical staff.

22. **Better use of resources.** The private sector investors also argue that natural gas should be reallocated from transport and captive power plants to the power sector for generation of electricity.