In June 2011, President Zuma stated that "The involvement of the private sector is critical to achieving our infrastructure initiatives. We must embark upon mutually beneficial public-private partnerships in championing our projects". Since then, 28 new Public Private Partnerships (PPPs) reached financial close in South Africa as part of the first round of the Department of Energy’s (DoE) Renewable Energy Independent Power Producer (REIPP) programme.

A further 19 PPPs are expected to reach financial close in June 2013 as a result of the completion of the second round of the DoE REIPP programme. Assuming that the third round of the programme will result in the closure of a further 21 PPPs, South Africa’s contracted PPPs would have increased to 93 by 2014.

Given the growth in the number of PPPs realised through the DoE’s renewable energy programme as well as those likely to arise through the Presidential Infrastructure Coordinating Commission’s (PICC) ZAR3.2trillion investment plan, it is likely that a PPP Secondary Market will emerge in South Africa in the next few years.

This paper seeks to identify the potential quantum of PPP equity that will be available for the establishment of a South African PPP Secondary Market and to identify the likely developmental stages of a local Secondary Market based on the evolution of the UK’s PPP Secondary Market.

The availability of an active PPP Secondary Market should attract more investors to the South African PPP market as it will provide investors with a well-defined exit route that would allow bidders to sell most of their equity stakes once projects become operational. A further benefit to the Southern African market would be that developers could recycle their equity through the PPP Secondary Market to fund a larger number of projects instead of tying-up the equity for the full concession period.

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Approach
In order to gain an understanding of the UK PPP Secondary Market’s evolution we analysed the European Services Strategy Unit (ESSU) PPP equity database which covers PPP equity transactions that took place between 1998 and 2012.

In performing our analysis we excluded a number of transactions that did not contain complete data sets and based our analysis on a revised database containing 212 individual PPP projects with a total equity value of more than £18.5billion.

Background to the UK market
PPPs or Private Finance Initiatives (PFIs), as they are often referred to in the UK, were first procured in the UK market in the early 1990s. They were introduced to increase the private sector’s involvement in the provision of public services and to alleviate some of the UK Government’s burden in respect of funding infrastructure projects. Since their introduction, more than 700 projects have been delivered by the private sector using PPP models.

A PPP secondary market began to emerge in the UK in 2000/2001 when the equity investors in some of the early PPP projects found buyers for their equity positions which allowed them to realise their returns prior to the end of the concession periods. The investors regarded the equity stakes in operational PPP projects as low risk assets with a guaranteed return. The demand for the PPP equity stakes enabled sellers to drive up prices through the use of competitive auction processes and to sell on favourable terms with little or no residual obligations.

The financial crisis had a marked, but short term, impact on both the number and value of PPP secondary market transactions. As illustrated in Figure 1 below, the number and value of equity transactions declined significantly in 2008 before resurging in 2009.

Based on the sample of transactions that we based our analysis on, the average time between financial close and the first secondary market transaction was approximately 5 years. Transactions generally took place a few years into the operational periods of the projects once construction risk had been eliminated and a short operational track record had been established.
Development of the UK Secondary Market

Figure 3 below seeks to illustrate the evolution of the UK's Secondary Market by identifying the cumulative value of transactions for each of the four investor groups up until 2011. The emergence of unlisted infrastructure funds in the early 2000s was followed by the entry of listed infrastructure funds a few years later and pension funds in 2007/2008. Each of the four investor groups is discussed in more detail below.

Portfolios built up by construction/O&M companies (1998 onwards)
A number of construction and operating and maintenance (O&M) companies built up large PPP equity portfolios in the 1990s and early 2000s as developers of PPP projects. A number of financial institutions also formed part of the bidding consortia and ended up owning equity stakes across several PPP projects.

Joint ventures between financial institutions and EPC/O&M companies and other unlisted funds (2003/2004 onwards)
The formation of joint ventures between the construction/O&M companies and financial institutions played a key role in the early consolidation of the UK's secondary market. The equity in PPP projects was usually transferred to the joint venture/unlisted fund shortly after the project became operational. Examples of these joint ventures/unlisted funds include those between:

- John Laing and the Commonwealth Bank of Australia (2004);
- Kajima Partnership and HICL Infrastructure (2005); and

Listing of infrastructure funds (2006/2007 onwards)
HSBC Infrastructure fund (HICL) was the first infrastructure fund to list on the London Stock Exchange (LSE). At the time of its listing in 2006, it was seeded with a number of PPP investments and it continued to be a prolific investor in PPP equity. The 3i Infrastructure Fund listed in 2007 and was followed by three other infrastructure fund listings on the LSE, namely: INPP; Gravis and John Laing.

The listed infrastructure funds provided an exit opportunity for financial institutions, such as HSBC, who had accumulated sizeable PPP equity portfolios. The funds also created an opportunity for fund managers to access cash from a much larger investment community to invest in new opportunities.

Figure 3: Cummulative Equity Spend in the Secondary Market

Source: Deloitte analysis based on data extracted from the ESSU PPP equity database
Note 1: Pension fund joint venture transactions are not reflected in above analysis due to incomplete datasets. As such, pension fund investment is potentially understated in value terms
Note 2: HICL’s seeding transactions are not reflected in the graph above
Joint ventures between pension funds and EPC/O&M companies (2007/2008 onwards)

The attractive characteristics of operational PPP investments, including their fairly predictable cash flows, resulted in pension funds entering the secondary market in the late 2000s. The pension funds initially entered the market by forming joint ventures with construction/O&M companies, such as:
- BAM and Dutch Infrastructure Fund (2007);
- Amey and Dutch Infrastructure Fund (2009); and
- Lend Lease and PGGM Vermogensbeheer (2010).

Returns realised in the secondary market

The internal rates of return (IRRs) realised on early PPP equity sales were often in excess of 50% as demonstrated in Figure 4 below, mainly due to refinancing gains priced into the sales proceeds. Lenders added significant risk margins to the debt issued for early PPP Projects as a result of the perceived risk. However, as lenders became more comfortable with PPP Projects, risk margins were reduced. The buyers of early PPPs often refinanced the debt on a portfolio basis and paid a premium to the seller in light of the fact that the Projects would benefit from significant gains on refinancing.

A report prepared by the UK’s National Audit Office (NAO) in 2012 revealed that initial investors or bidders typically anticipate IRRs of between 13% and 15% over the life of the project. However, in reality initial investors/bidders have been able to generate much higher returns by selling their equity stakes in the secondary market. According to the database we used for our analysis, an average weighted annual return of 25% was achieved across the 212 projects.

Profits generated by the private sector on secondary market transactions has attracted significant media attention in the UK and resulted in a perception that excessive profits were generated on government funded projects at the expense of the taxpayer. In response to the media attention, the UK House of Commons recommended in 2011 that PFI contracts should include a ceiling in respect of the level of profits that can be extracted from PFI equity together with a requirement that the public sector should share in 50% of profit above a specified level. When PF2 was launched in the UK in 2012, the UK Government introduced more stringent requirements in respect of equity return disclosures in addition to allowing the public sector to participate in equity returns through direct equity participation.

Figure 4: Weighted Average Annual Rate of return

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Equity in PPP projects was initially obtained by Construction and Operations & Maintenance companies through bidding processes. Construction and O&M companies began consolidating their equity in PPP projects. This signalled the start of secondary the market. Construction and O&M began recycling their equity in PPP projects. Joint ventures were created between Construction companies and financial institutions. Listed infrastructure funds emerged and started to purchase equity in PPP projects. Pension funds entered the market through joint ventures with construction / O&M companies.

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Source: Deloitte analysis based on data extracted from the ESSU PPP equity database

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According to National Treasury’s Database, adjusted for the DoE programme, 53 PPPs have reached financial close in South Africa to date whilst a further 19 DoE renewable energy PPPs are expected to reach financial close by 30 June 2013 bringing the total to 72 PPPs. The graph overleaf illustrates the growth in the number of PPPs between 1998 and 2013 and forecasts the number of PPP Projects that could reach financial close by 2020.

A number of assumptions were made to arrive at the forecast number of PPPs and their project cost which are listed under the assumptions heading of this paper.

Based on the forecast number of PPPs and project costs calculated, we estimated the cumulative value of secondary market equity that could be transacted by a PPP Secondary Market. The following assumptions were applied to arrive at the cumulative equity values:

- Five years will lapse between a PPP reaching financial close and its equity becoming available for sale. The assumption is based on the average period calculated for the UK PPP Secondary Market which is discussed in more detail in this paper; and
- PPPs are funded on a 70:30 debt: equity basis and that the equity therefore equals 30% of the project cost.

As illustrated in Figure 5, an estimated R19.2bn of equity in operational PPP Projects could be available in South Africa by 2017, rising to R47.3bn in 2020.

Figure 5: Weighted Average Annual Rate of return

Source: Deloitte analysis based on data extracted from the ESSU PPP equity database
According to the Venture Capital Association of South Africa, South Africa’s Private Equity market managed R81.7bn of invested equity in 2011. The forecasts performed for this report in respect of the growth of the South African PPP market indicate that equity in operational PPP projects could equal more than R45bn by 2020. Assuming that investment in the private equity market grows by 12% per annum to R226.5bn in 2020; the South African PPP Secondary market could be around a fifth of the size of the private equity market in 2020.

The forecast size of the Secondary Market could justify the establishment of unlisted funds from 2016/2017 onwards, similar to those established in the UK in 2003/2004. These funds may then seek to list on the Johannesburg Stock Exchange a few years later to provide an exit opportunity for their investors.
Assumptions used in estimating PPP equity available to the Secondary Market

The following assumptions were made to forecast the number and project cost of PPP projects that could reach financial close by 2020:

- The DoE’s Renewable Energy Round 2 preferred bidders will reach financial close in June 2013;
- A further 21 PPPs will reach financial close in 2014 as part of DoE’s procurement of the remaining 1,165MW of Renewable Energy under the current 3,625MW programme;
- The DoE’s Renewable Energy Small IPP procurement programme will result in 20 additional PPPs in 2015 and 2016;
- 36 PPPs will reach financial close in 2015 and 2016 as a result of the DoE’s potential allocation of a further 1,000MW of Renewable Energy in 2014 and 2015;
- 3 PPPs with an average project cost of R0.7bn will be procured per annum from 2014 onwards.
- An average project cost per MW of R26.9m was assumed for renewable programmes following round 2 of the DoE’s Renewable Energy programme based on the average cost achieved during round 2; and
- The projects costs for existing PPPs were obtained from National Treasury’s database. However, where the project costs were not available, we performed desktop research and analytical techniques to estimate the values.

Sources of information

The following sources of information were used:

- The National Audit Office – “Lessons from PFI and other projects.”
- The European Services Strategy Unit’s PPP Equity Database.
- South African National Treasury database.
- Discussions with National Treasury and SANRAL.
- The House of Commons “Lessons from PFI and other projects”
- The European Services Strategy Unit research report – “PPP Wealth Machine UK and Global trends in trading project ownership.”

Footnotes:

1 Excluding the Renewable Energy Small IPP programme that could result in more than 20 new PPPs.
2 These joint ventures were usually established on a 50/50 basis with infrastructure funds created by the financial institutions.
3 The equity proportion is higher than the ratios achieved on some early PPPs in South Africa, but consistent with ratios achieved on the DoE REIPPP programme and the trend in higher equity contributions seen internationally post the credit crisis and recommended under PF2.
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