# NEW APPROACHES TO PRIVATE SECTOR FUNDING OF PUBLIC SECTOR PROPERTY: A GLOBAL PERSPECTIVE

#### **Professor Alastair Adair**

Pro-Vice Chancellor University of Ulster, Northern Ireland e-mail: AS.Adair@ulster.ac.uk

Co-authors Universities of Ulster and Aberdeen research teams: Professor Jim Berry, Dr Martin Haran, Dr Lesley Hemphill, Professor Norman Hutchison, Manisha Gulati, Dr Anil Kashyap, Dr Nan Liu, Dr Michael McCord, Professor Stanley McGreal, Joseph Oyedele, Dr Piyush Tiwari

#### Abstract

The global financial crisis (GFC) has had a profound impact on real estate markets around the world in particular on the way in which public property and infrastructure is financed. The GFC has exposed the dependence on debt finance and the vulnerability of governments and end users to the economic cycle. In addition, illiquidity within the banking sector has been compounded by contraction in risk appetite across investors necessitating significant intervention on the part of national governments.

Such intervention reinforces a consistent feature of national government policies which is a commitment to engage in long-term partnerships with the private sector. Infrastructure investment gaps combined with budgetary constraints ensure that the private sector is likely to take on more not less significance.

OECD estimates project investment of US\$30-40 trillion required in global infrastructure up to 2030. The UK will be required to invest as much as US\$800bn in new and refurbished infrastructure by 2020. Quality infrastructure provision is fundamental to the attraction and expansion of FDI and sustainability of economic growth.

At a time of constrained public sector spending the challenge for national governments is significant and will necessitate the exploration of innovative investment structures/models. The impact of the GFC has been to reduce both commercial and residential property values dramatically resulting in less scope for developer contributions in financing infrastructure and other public property projects.

This paper draws on research covering three areas of public sector property funding namely, Public Private Partnerships (PPP), Tax Incremental Financing (TIF) and Business Improvement Districts (BID). The research over the period 2010-2012 is global in scale and combines both quantitative and qualitative methodologies.

Globally the cost of debt has increased markedly for infrastructure which has increased the Whole-Life-Costs of PPPs. Rising interest rates has made project funding more expensive and financial closure difficult. Furthermore, the illiquidity of infrastructure as an asset class has made many investors reluctant to be exposed to schemes which transcend the economic/financial cycle.

Consequently the PPP model has not met with universal approval. Rather misgivings centre on reductions in the quality of service/provision, perceptions of private sector profiteering and long-term liabilities on future generations of taxpayers. It is also clear that there is a need to educate investors on the benefits of infrastructure as an investment asset class.

While TIF is a global model its success depends upon the effectiveness of local application. Each proposed TIF project area is different, with its own unique set of ownership issues, development partners, scale of development, timeframe and agreed end use. TIF schemes are by their very nature long term and flexibility is important in order to be able to respond to changes in the property market, as well as to political and economic circumstances.

The BID industry is now significant in the UK with an estimated US\$266m investment in urban areas being raised via this funding model. BIDs provide real and tangible evidence of impact on the ground but the challenge for BIDs over the coming years will be to continue to deliver effective solutions for the benefit of the private sector whilst providing commensurate efficiency savings to their members.

The principal conclusion from the research is that managing the continuing negative fallout from the GFC and the pressures of the public sector financial squeeze could prove a difficult balancing act. In order to finance the infrastructure deficit identifying opportunities for innovative financing is paramount highlighting the need for enhanced skills among property professionals both to add value to the property asset and to engage more effectively with the wider capital markets.

#### 1.0 Introduction

The financing of both private and public real estate has altered dramatically due to the global financial crisis (GFC) which has resulted in a decline in the availability of debt financing for both the private and public sectors and more especially across all sectors and types of real estate. In relation to the private sector, research by De Montfort University (2011) shows that a quarter of the UK's outstanding commercial property debt, amounting to almost £50bn (US\$79bn), has loan-to-value (LTV) ratios of more than 100%. Almost a further 20% have LTVs of between 81-100%. With banks offering debt only at LTVs of 65.5% or below in mid 2011 as much as £114bn (US\$180bn) of loans had no prospect of refinancing and the report notes that situation has only worsened. The value of outstanding balance sheet debt including CMBS of £46bn (US\$73bn) and NAMA loans of £22bn (US\$35bn) has reached a new high of £270bn (US\$427bn). Indeed the ongoing uncertainty in the Eurozone and new legislation requiring banks to increase their liquidity has further driven down lending ratios (Maxted, 2011).

The financing of public sector property has also been adversely impacted by the GFC as governments around the world and especially in the west have been crippled by sovereign debt. The rising cost of public sector procurement in recent years has witnessed a consistent feature of national government policies to engage in longterm partnerships with the private sector to secure public sector assets. The GFC has had a profound impact on Public Private Partnerships around the world. It has exposed the dependence on debt finance and the vulnerability of end user PPP models to the economic cycle. It has also necessitated intervention on the part of national governments in order to ensure the sustainability of debt finance at a time when illiquidity within the banking sector has been compounded by a contraction in the risk appetite across investors.

This conundrum is further heightened by the fact that institutional investors continue to seek out alternative investments. However, it appears that the risk profiles of public sector property do not suit institutional investors. While infrastructure investment gaps combined with budgetary constraints ensure that partnerships for the delivery of public sector property are likely to take on more rather than less significance in the future the ability to raise finance remains a problem.

Amidst ongoing economic austerity, governments face a significant challenge to fund infrastructure projects. In many areas, market based solutions are not possible due to the scale of infrastructure required, at a time when land values are declining and occupier rents and yields remain uncertain. In order to create the conditions for growth, intervention by the public sector is considered an essential part of the solution.

In a world that is increasingly becoming more global and more urban and as the GFC has demonstrated bringing with it the risks of global financial contagion there is a counter pressure to make greater use of local resources and for more local definition and differentiation of cities within their local context. As nations and cities strive to compete for FDI local distinctiveness can yield a competitive advantage. In the UK this has found expression by policymakers focusing their minds on local solutions to local problems through the localism agenda to provide real and tangible evidence of impact on the ground. Local differentiation is the key.

At a time of constrained public sector spending the challenge for national governments is significant and necessitate the exploration of innovative investment structures/models. This paper draws on research covering three areas of public sector property funding namely, Public Private Partnerships (PPP), Tax Incremental Financing (TIF) and Business Improvement Districts (BID). The research over the period 2010-2012 is global in scale and combines both quantitative and qualitative methodologies.

The purpose of this paper is to examine new approaches to private sector funding of public sector property from a global perspective. The paper is structured as follows: A critical review of infrastructure financing literature is outlined in Section 2, followed by the research approach in Section 3, research findings in Section 4 and conclusions in the final section.

# 2.0 Financing Infrastructure

Quality infrastructure provision is fundamental to the attraction and expansion of FDI and sustainability of economic growth. Government budgetary constraints, primarily due to the GFC, have resulted in infrastructure provision failing to keep pace with economic expansion and public expectation.

OECD estimates project investment of US\$30-40 trillion required in global infrastructure up to 2030. It is estimated that the UK will be required to invest as much as £500bn (US\$790bn) in new and refurbished infrastructure by 2020. This will necessitate additional capital expenditure of £20bn (US\$32bn) per annum depicting current infrastructural investment levels (RICS, 2011a).

Post-GFC there has been a dramatic change in enabling infrastructure funding

in the UK. To a large extent prior to 2007, infrastructure in the UK was funded by planning value uplift, with infrastructure paid for by developers making contributions to the cost from their development profits (DLA Piper & CBRE, 2009). This model worked well when land values were rising rapidly between the late 1990s and 2007. However, during the economic downturn in 2007/08, both commercial property and housing values fell dramatically. This has resulted in significant reductions in the value of brownfield land, on which commercial and housing developments normally take place. The consequence is that most development schemes, where developer contributions were negotiated in stronger market conditions, are no longer viable financially (DLA Piper & CBRE, 2009). As a consequence the financing of enabling infrastructure has become a key issue. The alternative options for funding infrastructure in the UK have traditionally included public private partnerships (PPPs), private sector entrepreneurial projects and private finance initiative (PFI) schemes (Newell and Peng, 2008).

The PFI model has evolved to become one of the most commonly applied partnership models amongst national and regional governments around the world, including but not limited to Malaysia, Australia, Canada, Finland, France, Ireland, Japan, the Netherlands. Norway, Portugal, Spain, the United States and Singapore. Pertinently, in countries where PFI is the only partnership based structure the terms PFI and PPP have become synonymous. In more mature partnership markets, PPP is considered to be an all encompassing term transcending a diverse range of business structures and partnership arrangements that includes PFI as well as other forms of partnership structure comprising joint ventures and outsourcing arrangements associated with the delivery of policies. services and infrastructure.

In spite of its long-term application, private sector procurement of key infrastructure remains, even within the most developed PPP markets, a source of consternation generating concerns of accountability, risk dumping as well as conflicting public sector ethos (Flinders, 2005). According to Ball and Maginn (2005) the diversity and increasing complexity of PPP arrangements gives rise to a series of interrelated questions about the nature of the decision making process within such structures and the balance in power relations between the various stakeholders.

Hood et al (2006) argue that the deficiencies in empirical evidence have resulted in many evaluations of PPP being essentially polemic in nature, culminating in a capacity to merely assert rather than substantiate the worth of PPPs relative to conventional public procurement. The lack of emphasis on the 'added value' that partnership models bring relative to conventional procurement has meant that the "value-for-money" argument in favour of PPPs is difficult to prove, even if it is theoretically reasonable.

Hall (2010) argues that PPP project evaluations have too often been superficial lacking the rigour and depth of interpretation to facilitate meaningful assessment of the value created by the respective partnership structure or to enable definitive conclusions to be drawn on the overall effectiveness or efficiency of the PPP vehicle relative to more conventional forms of procurement.

The 'no viable alternative argument' is to some degree endorsed by an evaluation of European Investment Bank (EIB) financed PPPs across Europe (EIB, 2005). The evaluation found that of the ten projects selected for in-depth review, the key impact of the PPP mechanism was that the projects were implemented at all. In all ten projects public-sector budgetary constraints meant that the only alternative to a PPP project

was no project, or at least no project within the foreseeable future, rather than a public-procurement project. Nonetheless as the EIB evaluation notes "constraints on government borrowing are political decisions, not set in stone, consequently the extent to which government spending limits could have been adjusted to accommodate these projects without the need for PPP can be debated" (EIB, 2005 p4).

The search for alternative methods of financing has seen the emergence in the United States, of Tax Incremental Financing (TIFs) as a favoured model for funding infrastructure and development. Introduced in the 1950s, the TIF model is used extensively throughout the US to support urban renewal, affordable housing. land reclamation and public infrastructure projects. The TIF model involves the hypothetication or "ring fencing" of property taxes and is based on the assumption that property values within the designated TIF area will increase and generate sufficient increment tax revenue to finance the infrastructure improvements, often initially supported by a bond issue.

In the UK the scale of the infrastructure investment challenge allied with capital budget constraints has meant that the prospect of implementing TIF has gained considerable momentum in recent years. Significantly, the TIF model has found favour across a diverse range of key stakeholder groupings, in 2008, the Core Cities Group, along with PricewaterhouseCoopers published the first detailed study of how TIF could operate in a UK context in the report "Unlocking City Growth". The British Property Federation (BPF) has also been a key advocate in campaigning for TIF.

Since the mid 2000s UK government policy has shifted towards supporting the decentralisation of power to local authorities. Local authorities are empowered to make key decisions on

the direction of regeneration within their boroughs as well as having greater accountability over fundina. introduction of Supplementary Business Rate and Community Infrastructure Levy in 2009 and 2010 respectively, provides local authorities with revenue generating streams to fund infrastructure provision contributing to the economic viability of regeneration schemes. Moreover, the government white paper "Local Growth: Realising Every Place's Potential" (HM Government, 2010) further discusses localism and calls for consultation on business rate retention and TIF models. In July 2011 a consultation document entitled 'Local Government Resource Review: Proposals for Business Rates Retention' was issued by DCLG. The consultation centres on the repatriation of business rates and includes an overview of how TIF could be implemented to support local economic growth.

In 2009, APUDG launched an inquiry into the funding of regeneration in a recession. The report emphasised the need for cities to have additional financial tools such as Accelerated Development Zones (ADZs) to fund infrastructure. The report also recommended that ADZ/TIF pilots should be sanctioned to provide an opportunity for other potential users of TIF to understand how the model works. The plan was for the pilots to be used to push through a fully national TIF scheme from 2011 (APUDG, 2009). Recent years have seen numerous reports promoting funding tools for regeneration - concepts include ADZs, TIFs, Business Rates Supplements. Community Infrastructure Levy, Asset Backed Vehicles. Public Private Partnerships. Regional Infrastructure Funds and a Business Increase Bonus scheme - with only some reaching fruition.

Another method of using local property taxes to lever private investment is through Business Improvement Districts (BIDs).

In western economies governments are increasingly making localism and community empowerment a core pillar of policy, the benefits of local business involvement being determined by partnership and leadership capacity providing strategic thinking and creating the environment for economic growth. Evidence shows that BID communities are striving to adjust and adapt to the localism agenda in delivering service provision, public realm investment, crime reduction, marketing of city/town centres, and regenerating the high street. Delivery is achieved through business-led partnerships in tackling local economic recovery, facilitating community impact. generating sustainable funding streams and developing a clearly defined vision for city/town centres.

Evidence from the literature on BIDs (British Retail Consortium, 2009) shows that they are contributing to developing a unique sense of place based on an attractive public realm, ability to meet the needs of customers and retailers, safety and security in deterring retail crime and anti-social behaviour and the reduction of regulatory costs and financial burdens on property and business. BIDs are now expanding their remit in promoting and implementing key aspects of urban strategy, in particular the raising of additional finance to address local problems supported by a robust business plan. In this regard the challenge is in coping with the gradual decline of the high street, increased vacancy, and downward pressure on property values.

In a recent report produced by Business in the Community (May 2011), it is recognised that businesses working with local partnerships can produce complementary benefits to respond to the economic challenges threatening the vitality and viability of our city/town centres. In this regard, an effective "town centre first" policy is expected to achieve distinctive

and attractive town centres. create quality places and provide strong and sustainable local economies. The need for business engagement and investment is also paramount in regeneration locations (Adair et al, 2009). BIDs are seen to have cumulative policy actions that can complement wider strategic regeneration to build local confidence and commitment. Collaboration between local stakeholders and businesses is vital to harmonise funding streams and attract new investment. Within BID-led regeneration areas there is a need to research the competitive capacity of BIDs as a funding mechanism compared to other local asset based financing vehicles. targeting new and innovative financing models, leveraging of new funding streams, financing of infrastructure and regeneration, and assessing the risk-return profile on investment in BID-led regeneration areas.

The Nationwide Bid Survey (2011) highlights the advantage of using BIDs in parallel with other initiatives such as Tax Incremental Financing/Accelerated Development Zones/Enterprise Zones in complementing anticipated future increases in tax revenues to finance infrastructure and regeneration and to enable local authorities to trade anticipated future tax income for a present benefit.

## 3.0 Research Approach

The paper draws on three strands of research undertaken by the University of Ulster and a range of partners into the financing of public sector property. The first is research into Public Private Partnership/Public Finance Initiative by the Universities of Ulster and Aberdeen which was commissioned by RICS in 2010 with a focus on Australia, Canada, India, UK and US (RICS, 2011a). This research comprises a detailed content analysis of the literature on infrastructure investment challenge and the evolution of PPP, stake-holder

interviews and forum based discussions with key practitioners. The research also comprised the analysis of quantitative evidence from the Infrastructure Journal (IJ) online database.

The Tax Incremental Financing research (RICS,2011b) analyses US TIF models to consider whether lessons can be learned from their experience in the US, paying particular attention to the manner in which TIF areas are designated, the governance and legislative procedures necessary to set up a TIF, and the variety of risk sharing schemes in operation. In addition the success and weaknesses of TIF models in the US in raising property values and the methodology used to measure performance is also evaluated. The potential application of the TIF model in the UK is assessed. The first and second strands of research were undertaken by the Universities of Ulster and Aberdeen.

To understand the mechanisms of TIF programs in the UK, their purposes, the criteria required, and their evaluation models, three case studies were undertaken based on face-to-face interviews conducted with participating parties, business cases and local authorities' committee reports.

The third strand of research comprises an analysis of Business Improvement Districts more specifically the Nationwide BID Survey 2011 (BID, 2011). The survey was carried out by a joint research team comprising Alliance Boots, British BIDs, and the University of Ulster together with the RICS. The survey represents the most comprehensive assessment of the rapidly growing BID industry in the UK. The online questionnaire survey covers 112 BIDs across the UK and Ireland achieving a response rate of 73%, which is a significant sample size.

Following the drafting of the BID questionnaire, a consultation session with five BIDs was held to examine the scale and extent of the questionnaire and to ensure appropriate lines of enquiry. The second revised questionnaire was then subjected to a pilot exercise whereby two BIDs were asked to test the online survey and feedback any technical and comprehension issues. These comments were then integrated into the final online version of the survey.

## 4.0 Research Findings

# 4.1 Role of PPP in Infrastructure Funding

More than 40 countries around the world have implemented a PPP model. The research examined global PPP deals

reaching financial close 2005-2010. the period 2005-2010 1,046 PPP deals with a capital value of circa US\$350bn achieved financial close around the world. The global PPP market peaked in 2007, when 241 projects with a capital value of circa US\$79.1bn reached financial close. In 2010, the global PPP market continued to grow, albeit at a much slower pace than was evident in the previous five years. In total, 122 deals achieved financial close in 2010, a decline of 28% on the previous year, but perhaps of greater significance is the realisation that the total capital value of deals reaching financial close continued to increase, from US\$48.5bn per annum in 2009 to US\$51.6bn in 2010.

Whilst the roll-out across PPP markets has gathered pace over the course of the last decade, it is clear that different markets are at very different stages of development and

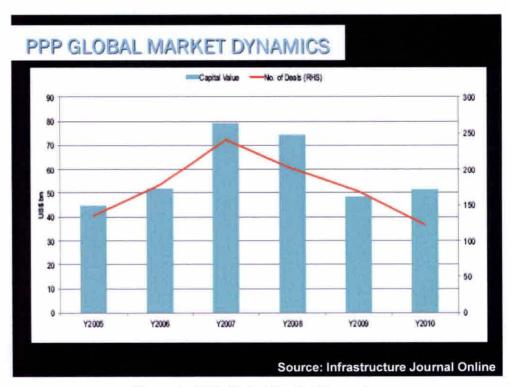


Figure 1: PPP Global Market Dynamics

maturity. The position of different countries along the maturity curve is shown in Figure Maturity is determined by two dynamics - the level of activity and the levels of sophistication - this in essence depicts the type and forms of infrastructure procured through PPP. In most instances countries introduce PPP on hard 'infrastructure' such as road and bridges - as there is a strong international precedent for these forms of structure. As understanding of the model improves it can then be applied to more sophisticated projects such as social infrastructure in the form of schools. hospitals, correctional facilities etc. Most recently the move has been towards renewable energy provision in the form of wind farms and off-shore hydro projects.

The GFC had a profound impact on PPP markets around the world manifest through a marked decline in the number of PPP deals at the global level. The decline is due

to macro-economic uncertainty as well as ongoing illiquidity within the international banking sector which has resulted in many PPP projects around the world being shelved, at least in the short-term. Ongoing illiquidity within the global banking system is manifested through the financial restructuring of PPP deals pre and post GFC. Debt funding for PPPs at the global level peaked in 2007 at US\$60.5bn but has subsequently fallen to circa US\$30.75bn in 2010, the lowest level since 2004.

The increased cost of debt finance postfinancial crisis has pushed deal margins on PPP transactions at the global level out to over 200bps. As a consequence the average capital value of deals have continued to expand to ensure economic viability and to some degree explains the continued uplift in the capital value of PPP projects per annum in spite of the decline in deal numbers. Analysis of the financial

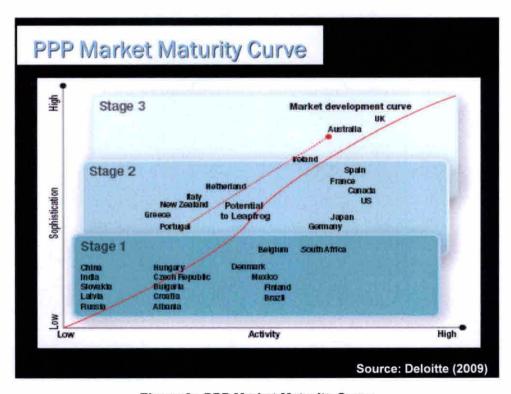


Figure 2: PPP Market Maturity Curve

makeup of PPPs reaching financial close in the UK over the six year period 2005-2010 highlights the dependency on debt finance (Figure 3). The Infrastructure Journal (IJ) online database contains profiles of 334 PPP deals which achieved financial close in the UK over the six year time frame 2005-2006. Total project finance on the 334 deals amounted to circa £75.3bn (US\$121.9bn), comprising £60.7bn (US\$98.3bn) debt finance, £8.1bn (US\$13.1bn) equity finance and £6.5bn (US\$10.5bn) Multilateral and Government (M&G) Finance.

Across the range of countries we see a similar pattern of debt finance as the key source of funding for PPP pre-financial crisis (Figure 4). The wholesale availability and comparatively low costs of debt ensured that private sector partners could secure favourable margins on infrastructure deals. The contraction in debt provision within the

global banking system is manifest through the financial restructuring of PPP deals pre and post the 2007 global financial crisis.

The challenge for governments is to unlock the capital resources which have the financial wherewithal to invest in large scale infrastructural projects but which also have the long term investment horizons conducive to infrastructural investment. In this respect pension funds remain a largely untapped financial resource. With many pension funds underwater and in need of alternative strong income producing opportunities, the potential for 'mutually' derived benefits needs in-depth exploration.

Despite the success of PPP/PFI in other counties in delivering infrastructure, in the UK a consensus exists (even amongst proponents of PFI) that the 'PFI' model is 'tarnished' – public perception is that assets

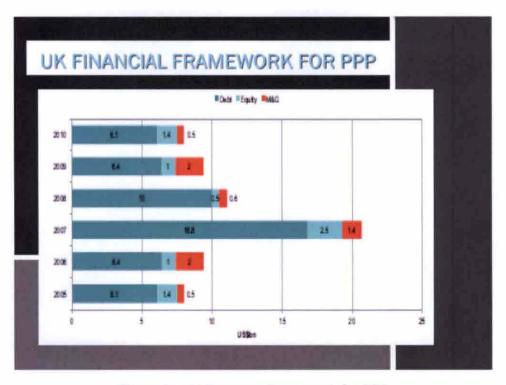


Figure 3: UK Financial Framework for PPP

delivered under PFI represent poor value for money and will be a cross generational burden on tax payers. This view has been compounded within certain elements of the print media who have sensationalised the facts pertaining to private sector profiteering/exploitation, the lack of genuine risk transfer and the poor quality of service provision relative to associated costs and/ or other forms of procurement.

This view does not recognise the value that PFI has delivered as a procurement strategy to deliver a significant quantum of infrastructure assets on time and on budget and to a high level of specification. Moreover, whole life costing and the advent in lifecycle FM contracts (encompassing reactive and planned maintenance) have ensured assets continue to be maintained to a high standard – preserving their asset value and functional capacity. It is widely

recognised that one of the key deficiencies within the existing PFI framework is the costs associated with 'private sector capital'. The higher costs are reputed to be offset through the innovation and efficiencies pertaining to private sector involvement but there is little evidence to suggest that the 'innovation' and efficiencies derived represent 'value for money'. There is a requirement to reduce the cost of capital and to explore alternatives to the debt funded (bank lending model) which has been a mainstay of PFI deals across the UK.

Institutional investors have been identified as a potential source of alternative funding. However, knowledge and understanding of the infrastructure asset class within the institutional investment community is limited. There is a requirement to convey the investment potential of the asset

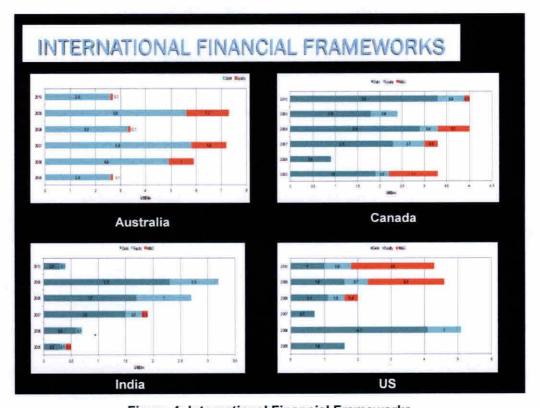


Figure 4: International Financial Frameworks

class to key investors and to develop their appreciation of the asset class attributes. From a practical perspective there is requirement to develop innovative structures investment that enable institutional investment to be channelled into infrastructure in a co-ordinated manner. Additionally, given the risk adverse nature of institutional investors, it is probable that the public sector will be required to facilitate investment by de-risking projects either through under writing/project guarantees or entering into co-funding/joint venture models.

The 'inflexibility' of PFI model and the 'fixed' nature of the unitary charge mechanism over the lifecycle of the contract has a number of deficiencies. Firstly, it restricts the capacity of public sector clients to strategically plan for the future as they are contractually bound to pay for an asset which could later prove to be technically/ functionally/economically obsolete prior to the end of the contractual term. Secondly, the unitary charge is not conducive to nor does it encourage continuous improvement/ lifecycle innovation on the part of the private sector. Thirdly, future PFI/procurement frameworks should be designed with flexibility to accommodate or incorporate change mechanism which allows the client flexibility to capture technological innovation/material enhancement in a cost effective manner and at the same time affording a reasonable level of return to the private sector provider - 'mutual incentivisation'

'Risk apportionment' remains an area of contention within the confines of the PFI framework. Risk is considered to be most effectively allocated when its rests with the stakeholder 'best placed' to manage it. Evidence would suggest however that public sector clients need to further develop capacity in terms of the skills, capabilities and expertise of procurers to

be able to allocate risk appropriately and understand the commercial outcomes of risk retention and risk transfer. Moreover, the capacity to evaluate, manage and price risk within the private sector also needs enhancement. Whilst the private sector has become proficient in managing risk across the construction phase the same levels of sophistication, understanding and effective management of risk are not being manifest over the operational phase.

PFI projects by their very nature are capital intensive, complex and time consuming. Preparation prior procurement commencing can involve lengthy time periods with complex clientside organisational structures. procurement models should look to create 'early Engagement' of the private sector supply chain to assist in the assessment, forecasting and confirmation of demand. A fully developed brief leading to the production of output based specifications for delivery of 'fit-for-function' facilities should continue to be recommended in promoting innovation from the supplyside as well as curtailing 'gold plating'/ aspirational specifications. In the UK, financial close can take up to 36 months. compared internationally with 18 months in Canada.

The procurement process pertaining to PFI needs refined and streamlined. It is elongated and as a consequence is unduly expensive. The recommendations of the Lean Procurement Initiative to support the UK Government Construction Strategy should be implemented for less complex projects to deliver time and costs savings culminating in better value for money. The creation of a more 'intelligent' client will improve project definition, procurement and contract management of public infrastructure projects funded through private finance.

The difficulty with assessing and evaluating the performance of PFI relative to other procurement strategies/routes/models is the lack of transparency pertaining to a robust and 'credible data framework'. As a consequence, evidence based analysis depicting credible and objective quantitative evaluation is problematic. This necessitates the creation of a standardised and accepted data collection framework which can be retained and accessed within a centralised repository.

# 4.2 Role of Tax Increment Financing (TIF) in Infrastructure Funding

Currently in the USA 49 states, the District of Columbia and the US Virgin Islands have enacted enabling legislation for TIF. It is difficult to calculate the total number of TIF districts operating in the US because not every state requires their registration (BPF, 2008). A study by Webber and Goddeeris (2007) highlighted that in the state of California alone there were 386 active TIF districts in 2003. Meanwhile, at the end of August 2011 Chicago had 163 TIF districts generating circa \$500m in additional property tax collections each year (Chicago TIF Reform Panel, 2011). It is estimated that between 175 and 225 bond financed TIF transactions are conducted annually within the US (PPP Journal, 2011).

The assessed values of all properties within the TIF are frozen at the moment of designation. This is known as the "base value" or "initial assessed value". In most US states, the base value stays the same for the lifespan of the TIF, in some states however, the base value increases with inflation. Property owners within the TIF district pay their "normal" tax burden (based on the current assessed value of their property), therefore TIF is not a new tax (Johnson and Kriz, 2001; Webber & Goddeeris, 2007). Each year, an increment is calculated as the difference between the amount of tax at the current value of

the improved property and the base value. Instead of sharing these increments with the overlapping jurisdictions, tax increments are channelled to the TIF authority and used to finance any debt the authority accumulated when making improvements during the lifespan of TIF. The allocation of tax based on the assessed value is shown in Figure 5. Once a TIF project is terminated, other overlapping jurisdictions will be entitled to a share of the increment revenues.

As a result of the time difference between TIF expenditures and receipts, TIF projects require upfront funding. Funding can be raised through the "pay as you go" method, which requires the developer to pay for their own development expenses, with the tax increment generated within the TIF district then used to reimburse the developer. Bond financing is another method that is commonly used. Unlike traditional general obligation bonds, in most states, TIF bonds are not subject to municipal debt limits or public referendum requirements. Revenue to repay bonds is generated from the incremental taxes levied on the TIF districts' new assessed valuation after a given base year (Johnson, 2001).

The third method for front-funding TIF projects is issuance of short term, higher-interest debt securities known as Tax Anticipation Notes (TANs). Such notes are provided by the public sector to the developer, who then sells them to the highest bidder, ordinarily banks and institutional investors.

In May 2011 the Mayor of Chicago called for TIF reform and set up a task force charged with brining "TIF back to its roots". The reform was commissioned on the premise that TIF within Chicago had become 'maligned' in recent years due to a lack of transparency, accountability as well as perceived inefficiencies. The final report of the task force published in August

2011 acknowledged the success of TIF in stimulating economic and community development in underperforming areas across Chicago. Nonetheless, the task force report offered six recommendations to improve accountability and promote more effective use of resources including a requirement that the objectives of a TIF at designation is in compliance with the overall strategic objectives and economic development plans of the city. noteworthy that in the ensuing economic climate calls for reform to TIF legislation are currently being pursued across a number of other US states. New York, for example is seeking to reform its TIF legislation to encompass school districts to make the model more viable. In stark contrast, the Governor of California has motioned a proposal to end TIF initiatives in the state citing that the model is no longer sustainable given the dramatic change in the financial landscape of a state which has historically embraced tax innovation (Youngman, 2011).

Experience in the US has shown that TIFs can significantly enhance economic

development both in terms of scale and speed, as well as reducing the burden on public sector finances. However TIFs are not without their critics. Issues include definitions of 'blight' and the 'but for' test have been abused to create TIF districts that could be developed without public subsidies; development may result in increased demand for services in a TIF area which are supplied by overlapping jurisdictions who have no access to uplift in the tax base for the duration of the TIF; and no guarantees that the renewal effort will increase tax base.

TIF is not a new concept and there is a significant evidence base from the US to inform current thinking. At the outset, clear criteria require to be laid down on the rules and procedures that should be adopted to screen TIF applications, otherwise there is the potential for abuse. For example, the rules should give clear guidance on the 'but for' and blight tests, the calculation of the displacement figure and extent to which the TIF area can extend beyond the immediate development area. Local authorities should be required to regularly evaluate

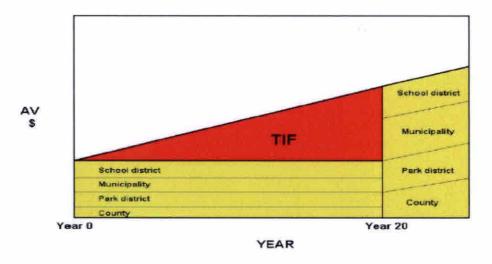


Figure 5: TIF Allocation of Tax\* (\*lifespan of the TIF = 20 years)

Adapted from Webber and Goddeeris (2007),

the success of TIF schemes against broad economic objectives. Success needs to be judged against wider criteria than simply whether the scheme has been built out.

The UK case studies comprising existing TIF projects in Edinburgh and Ravenscraig Scotland and proposed project in Battersea London in Table 1 demonstrate that each project area is different, with its own unique set of ownership issues, development partners, scale of development, timeframe and agreed end use. TIF schemes are by their very nature long term and flexibility is important in order to be able to respond to changes in the property market, as well as to political and economic circumstances. The partnership agreement between the public and private sector needs to include detailed agreements on the required performance of all parties, with arrangements in place to address the risk of non-performance.

TIF is not "one model fits all". While the first two TIFs in Scotland require relatively large funding utilising TIF for smaller projects may be appropriate. The public sector needs to understand the risk involved in such schemes and the restrictions on prudential borrowing. As the market matures, institutional investors may become more interested, and a bond market may emerge - but the development of TIF is still at early stage.

In 2011, the UK Government ordered a review of TIF and proposed two options in which TIF could be operated within a business rates retention scheme (DCLG, 2011).

**Option 1:** Local authorities would be allowed to determine themselves whether to invest in a TIF scheme but would not exempt the revenues from the impact of the retention scheme. (E.g. subject to a possible levy and revenues would be taken into account in any reset of top ups and tariffs.) Thus there is no special treatment

of the revenues in the TIF area. Local authorities would have certainty about how the levy is applied to recoup a share of disproportionate benefit and would be able to plan borrowing and TIF projects on that basis. The number of TIF schemes would not be limited.

Option 2: Stronger government controls on the ability to bring forward a scheme, but would guarantee revenues, without the risk of loss to the levy and reset process. Business rate growth resulting from a TIF scheme would be retained for a defined period of time. Clear benefit of a guarantee that business rate growth could be used to service debt. However, from a government perspective less money would be available in the levy pot to manage volatilities and potentially smaller proportion of resources would be available for re-balancing at any reset. This approach would require government control on the number of TIF schemes with competition or bidding process introduced.

For TIF to attract funding legal certainty is required so that the uplift in rates revenue can be used to finance the borrowing costs. Based on this fundamental decision. rule, only Option 2 as put forward by DCLG in their consultation document has any credence, but should be subject to the phased roll out of the scheme to ensure its orderly introduction. Option 2 is the preferred option but the introduction of TIFs should be phased in order to ensure orderly and better informed adaptation. In preparing the rules and procedures clear quidance should be given on criteria local authorities should use to judge the 'but for' and 'blight test' and calculation of displacement effects. The Government should require that local authorities are regularly required to evaluate the success of TIFs against the business case including the contribution to the implementation and integration of local economic strategy.

Table 1: Comparison of UK TIF Case Studies

Location	Edinburgh Waterfront Scotland	Ravenscraig Phase 2 Scotland	Vauxhall Nine Elms Battersea Opportunity Area, London	
Status	TIF in operation	TIF in operation	TIF being considered TIF not operational in England	
Area	500 acres			
Existing use	Dockland	Steelworks	30 sites; former Battersea Power Station is key site	
Infrastructure funded by TIF	New link road between Seafield Road and Constitution Street; Public esplanade and events hub outside Ocean Terminal; New finger pier for the Royal Yacht Britannia and visiting cruise liners; New lock gates for Leith Harbour	A723 road upgrade and dualling; Airbles Road dualling and upgrade to the VVVM74; Strategic site infrastructure works and land acquisitions	Redevelopment proposal for the power station site consists of mixed use scheme residential (3,400 new homes), retail, office, hotel, leisure, conference centre, museum and gallery space, and community facilities	
Estimated cost	£84 million	>£73 million	Developer's analysis to phase the Northern Line Extension cost to £406m for phase 1 (completion of NLE and Battersea Stations) with phase 2 circa £160m for the Nine Elms station. Further infrastructure at Nine Elms brings total cost to circa £908m for roads, schools and community facility provision	
Commencement	2012	2012		
Outputs	Unlock circa 810,000 sq ft of new commercial space, 1,100 new hotel beds, and 1,240 residential units, 25% will be affordable housing	620,000 sq ft shopping centre in addition to a range of leisure, restaurant and community facilities	Potential for 16,000 new homes	
Jobs created	Circa 5,000	4,450 net additional full time equivalent jobs. 500 full time construction jobs during the four year construction period with associated construction GVA of £25 million	Potential for 25,000	
Gross value creation to economy	£140 million per annum	£100 million GVA added to the Scottish economy Infrastructures are projected to attract £425 million of private investment		
Displacement	29% weighted by floorspace	24.8% Weighted by NDR and floorspace		
TIF length	25 years	21 years		
Developer contribution	0	£19 million		
Risk management by Council	Enabling infrastructure delivery is phased Council can pull out at any time Forth Ports PLC will face penalties if fail to deliver on time	Back-to-Back agreement still in negotiation Town centre developer will not commit without major anchor tenant and pre-lets in place		

# 4.3 Role of Business Improvement Districts (BID) in Infrastructure Funding

The BID industry is now significant with an estimated 60,000 businesses investing through BID levies across the UK raising a combined total levy income of around £61m (US\$97m). Beyond that base level, additional income is leveraged into the BIDs totalling around £69m (US\$109m) plus an additional £38m (US\$60m) representing investment leverage in BID areas. So, in the region of £168m (US\$266m) investment in urban areas is being raised via the BID model across the UK.

The essence of BIDs is about innovative interpretation of local needs delivered through partnerships at many different levels. They have become highly focused delivery bodies with wide-ranging agenda and highly-tuned and effective governance structures that ensure a good breadth of engagement at local level. At a time when policymakers are focusing their minds on local solutions to local problems through the localism agenda, BIDs provide real and tangible evidence of impact on the ground. The Local Government Resource Review (DCLG, 2011) suggests that the local retention of business rates uplift will help to incentivise local authorities to take action to promote growth. It also indicates that local authorities would be able to choose to borrow against this future growth in business rates through Tax Increment Financing (TIFs) schemes to help fund the provision of infrastructure and wider area regeneration. In short the retention of business rates proposed as part of the localism agenda will help restore the link between local authorities and their business communities, thereby enabling local areas to see the financial benefits of allowing commercial development.

The concept of the investment multiplier is used to illustrate the amount of additional

regeneration investment that has been generated in a BID area. This investment does not directly benefit the BID financially but the knock-on impact for the BID area or city in general is likely to be significant. The additional investment multiplier refers to indirect investment attracted beyond the BID bank account.

The ratio of the combined BID Levy and Additional Income to the Additional Investment helps us calculate for every £1 of combined BID income how much the wider BID area is benefiting in terms of indirect investment revenue. The total combined Income (£36,477,223) and the total Additional Investment (£38,869,398) (Table 2) provides a cumulative combined income-additional investment ratio for 2010/11 of 1:1.07, meaning that for every £1 of BID income generated across the 35 BIDs, that we have indirect investment and direct income information for, a further £1.07 was levered in additional indirect investment.

Examination of Table 2 highlights that the highest income-investment ratios were evident amongst a variety of both renewed and advanced First Term BIDs with the Heart of London Business Alliance ratio of 1:22.62 the clear leader. This ratio illustrates that for every £1 of BID income Heart of London managed to lever a further £22.62 in additional investment demonstrating very impressive leverage ratio of private sector investment over and above the BID generated income. A high ratio was returned by Alloa Town Centre BID (1:14.96) which was all the more significant given that Alloa has yet to reach first renewal stage. Of those renewed BIDs, Birmingham Broad Street (1:7.28) and Waterloo Quarter BID (1:4.22) see an upsurge in indirect investment return. In total 9 of the 35 BIDs (25.7%) displayed ratios over 1:1 while a further 5 of the 35 (14.3%) leverage 1:0.5 or better showing they were contributing the generation of at least half of their combined BID income in further indirect regeneration investment for the area.

The future of Business Improvement Districts will be influenced by their ability to attract private sector investors especially institutional investment in line with the decentralisation agenda within the Localism Bill and Government proposals for local retention of the uplift in business rates. The report notes that BIDs are already playing a crucial role as champions within a local area and as such could be described as 'localism in action'.

Under the Local Government Resource Review (DCLG, 2011) proposals to enable local authorities in England to retain a share of the growth in their local business rates should potentially provide the financial stimulus to facilitate economic growth in local communities. In essence, local authorities will be incentivised to promote growth through proactive development and investment in partnership with the private sector.

The investment leverage ratio of 1:1.07 provides further evidence of BIDs wider regeneration impacts. Furthermore, the wider role of BIDs in areas such as tourism and the possible introduction of Tourism

BIDs, or TBIDs as they are being referred to, demonstrates the further potential of BIDs to expand beyond the traditional BID model.

#### 5.0 Conclusions

Despite the success of PPP/PFI funding across a number of countries the impact of the GFC and the increased cost of debt financing has tarnished the public perception of PPP/PFI and restoring confidence in future models is vital to their success. Any review of PFI and the establishment of innovative alternative funding models must be presented within The RICS argue a new framework. that irrespective of funding streams, the common public perception is that the current model doesn't work. This view has been fuelled within certain quarters of the media and in many instances is borne out of a lack of understanding of whole life costing and how the PFI model works. A consensus exists among the experts that large components of PFI have worked and it is imperative that these are retained and built upon. In relation to PPP/PFI there is a recognition that the industry needs to improve how it shares knowledge, learning and data cross sectorally and internationally and professional organisation such as the RICS have a key role in communicating

Table 2: City/Town Centre BID Additional Investment Multiplier

BID	BID Levy (L)	Additional Income (I)	Combined Income (C)	Additional Investment (In)	R=(In/C) 2010/11
Alloa TC BID	104,000	70,000	174,000	2,603,000	14.96
Birmingham Broad Street	400,000	40,000	440,000	3,205,000	7.28
Falkirk BID	170,000	159,020	329,020	1,220,000	3.71
Great Yarmouth BID	97,602	85,000	182,602	237,500	1.30
Heart of London Business Alliance	667,000	258,000	925,000	20,930,000	22.62
Kings Heath Partnership	120,000	21,500	141,500	500,000	3.53
Waterloo Quarter BID	446,940	74,362	521,302	2,200,000	4.22
Total	29,049,371	7,427,852	36,477,223	38,869,398	1.07

objective and accurate information on the performance of such funding vehicles.

While TIF can be a workable model to finance regeneration during a period when public sector expenditure is likely to be severely constrained, the model is predicated on value uplift and this may be difficult to achieve during a recessionary period. The current downturn in the economy should nonetheless be seen as chance to prepare the enabling legislation in order for the funding tool to be available post-recession.

Amidst а background of economic financial stagnation and recurring uncertainty, new and innovative approaches are required to deliver the economic growth that countries so desperately Moreover, the economic impasse represents a window of opportunity to make radical, but widely acceptable, reforms to the local government finance system to promote local economic growth and foster local financial autonomy. It is imperative however, that local authorities are furnished with the 'tools' to support localised economic strategy. respect, the US offers a credible evidence base underpinning the TIF model as a means of promoting economic expansion, supporting job creation and facilitating neighbourhood regeneration.

The ongoing consultation on TIFs is to be welcomed, equally the levels of due-diligence and the requirement for robust legislative frameworks that permit flexibility/ adaptability are to be endorsed, particularly in light of recent TIF reforms within the US. The requirement to stimulate economic activity is nonetheless immediate and it is imperative that the momentum and energies channelled into the introduction of TIF within the UK is not lost – at present they represent the only viable solution for funding major infrastructure schemes.

BIDs will continue to play an important role in terms of innovative local service delivery and the co-ordination of funding in response to public sector finance efficiencies and ongoing policy changes. The strength of the BID model continues to grow especially as BIDs reach maturity and the lessons learnt from these renewed BIDs get fed back into the wider BID community. There will be a need for BID management teams to ensure that they have the necessary skills and resources to contribute to the implementation of town centre retail planning policies.

However the dynamic nature of BIDs will become increasingly tested through a continued squeeze on public spending and the changing investor risk profile which will see only the most robust business plans gain additional funding. This income generation and the wider investment potential of the BID model needs to be safeguarded and supplemented where necessary by complementary financing models such as TIFs and Local Asset Backed Vehicles to ensure town and city centres maximise their regeneration delivery capabilities. However, it is clear that the BID model continues to deliver and while this is still the case then the benefit of this BID approach will stand up to scrutiny.

The challenge for BIDs over the coming years will be to continue to deliver effective solutions for the benefit of the private sector whilst providing commensurate efficiency savings to their members. Meanwhile, managing the pressures of the public sector financial squeeze could prove a difficult balancing act — identifying opportunities to innovate and commercialise previously public sector activities whilst being cautious not to take on cost pressures thereby failing to ultimately achieve additionality.

## **Acknowledgement**

The research team at the Universities of Ulster and Aberdeen would like to express their gratitude to the RICS for affording them the opportunity to undertake the underpinning research reported in this paper. Also co-researchers in the BIDs research Alliance Boots (Andy Godfrey), British BIDs (Dr Julie Grail, Paul Clement, Sarah Telles) and RICS (Dr Clare Eriksson, James Rowlands, Amanprit Johal, Auriel Fielder). The research team would also like to acknowledge the huge support received from key stakeholders in the compilation of the research and to thank the contributors who so willingly gave of their time to convey their views and opinions and share their knowledge and experiences.

#### References

Adair et al (2009) Urban Regeneration: Opportunities for Property Investment, Investment Property Forum, London, August.

All Party Urban Development Group (APUDG). (2009). Regeneration and the Recession: Unlocking the Money.

Ball, M. and P.J. Maginn, P. (2005) Urban change and conflict: evaluating the role of partnerships in urban regeneration in the UK. *Housing Studies*, Vol. 20, No.1, pp. 9–28.

BID Survey (2011) Nationwide Business Improvement Districts (BID) Survey, RICS, London.

British Property Federation (BPF). (2008). Tax Increment Financing: A New Tool for Funding Regeneration in the UK? London: British Property Federation.

British Retail Consortium (2009) 21st Century High Streets: A new vision for our town centres, British Retail Consortium, London.

Business in the Community (2011), Future High Streets, Businesses Going Local, London, May.

Department for Communities and Local Government (DCLG). (2011). Local Government Resource Review: Proposal for Business Rates Retention, London.

DLA Piper and CB Richard Ellis. (2009). Regeneration and the Recession: Unlocking the Money, An inquirty carried out by All Party Urban Development Group (APUDG).

EIB (2005) Evaluation of PPP Projects Financed by EIB. Evaluation Report: Operations Evaluation. European Investment Bank (March 2005).

Flinders, M. (2005) The Politics of Public-Private Partnerships, *British Journal of Political and International Relations*, vol 7, pp.215-239.

Hall, D. (2010) More public rescues for more private finance failures – a critique of the EC Communication on PPPs. *Public Services International Research Unit (PSIRU)*.

Hood, J., Fraser, I. and McGarvey, N. (2006) Transparency of Risk and Reward in U.K. Public–Private Partnerships. *Public Budgeting & Finance* (Winter 2006).

HM Government. (2010). Local Growth: Realising Every Place's Potential. Norwich: The Stationery Office.

Johnson, C. (2001). The Use of Debt in Tax Increment Financing. In C. L. Johnson, & J. Y. Man, Tax Increment Financing and Economic Development: Uses, Structures, and Impact. Albany: State University of New York Press.

Johnson, C., & Kriz, K. (2001). A Review of State Tax Increment Fiancing Laws. In C. Johnson, & ,. J. Man, *Tax Increment Financing and Economic Development: Uses, Structures, and Impact.* Albany: State University of New York Press.

Maxted, W (2011) Commercial Property Lending Market Report, De Montfort University, Leicester, UK.

Newell, G., & Peng, H. (2008). The Role of US Infrastructure in Investment Portfolios. *Journal of Real Estate Portfolio Management*, 14 (1), 21-13.

Royal Institution of Chartered Surveyors (RICS) (2011a) The Future of Private Finance Initiative and Public Private Paertnership, London.

Royal Institution of Chartered Surveyors (2011b) *Tax Increment Financing – An Opportunity for the UK*, RICS, London

Webber, R., & Goddeeris, L. (2007). Tax Increment Financing: Process and Planning Issues. *Lincoln Institute of Land Policy Working Paper*.

Youngman, J. (2011). TIF at a Turning Point: Defining Debt Down. Lincoln Institute of Land Policy Working Paper.