



UNTAPPED WEALTH

**Toward Modern
Management of Public Assets**

Editors

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Foreword

Imagine that a pandemic breaks out that generates a health crisis of enormous dimensions. The governments of the world are forced to take extreme measures, such as generalized lockdowns, business closures, and special sanitary measures and social distancing in public places. The economic impact is not long in coming, so governments decide to provide subsidies to the people and companies most affected by the economic crisis. Meanwhile, tax revenues fall, as does economic activity. Then a vaccine appears and must be given to everyone to end the crisis as soon as possible, but it turns out that it requires very particular storage conditions.

In this scenario, the government must respond quickly. It plans to reduce the amounts it charges for leasing its properties to small and medium-sized enterprises (SMEs) and companies particularly affected by the crisis, but it does not have a list of all its tenants. It wants to resume service in public offices but does not know the occupancy capacity of its offices with the new sanitary requirements of social distancing,

nor the sanitary conditions of its buildings. Next, it wants to generate some quick income to finance the higher emergency expenses and compensate for the loss of income, but it does not know which of its properties have the highest value and can be sold quickly without affecting the service to citizens. Finally, it wants to set up a drug distribution chain, but it does not know where there are refrigerators cold enough to store the new vaccines. This scenario is all too familiar to many governments today.

Historically, Latin American governments have accumulated extensive assets, either inherited from colonial periods or obtained through policies and the expansion of the State. In recent decades, globalization, new governance models, and the need to meet citizen demands have changed service delivery systems managed by the State. These phenomena have affected the operation and/or management of national assets such as public buildings, movable property, land, forests, cultural heritage, and other nonfinancial public assets.

Unfortunately, in Latin America and the Caribbean (LAC), societies have not reaped the many potential benefits that nonfinancial public assets could generate.

In many cases, the growth of the public sector has contributed to an accelerated and poorly planned allocation of national assets, reducing the flexibility for new uses. It has impacted the valuation of such assets or simply has not recognized significant ways that they could be used.

Unfortunately, in Latin America and the Caribbean (LAC), societies have not reaped the many potential benefits that nonfinancial public assets could generate. The lack of adequate management instruments, technological tools, and outdated regulatory frameworks limit the economic and social uses of these assets. This affects their ability to contribute to the emergence from crises. Needless to say, intangible assets, such as knowledge, information, software, patents, and others, are far less explored and even more underutilized.

To support the governments of the region in their initiatives to improve public asset management, the Inter-American Development

Bank (IDB), together with several strategic partners, has organized several discussions¹ in recent years to address this unexplored topic. These events have highlighted the management and efficient use of public assets as an important instrument to help governments meet their fiscal and public policy objectives.

This publication, which is based on experiences of international experts, practitioners, and the IDB in this area, is meant to contribute to this effort. It is organized in three chapters. The first chapter discusses the importance of efficient asset management in LAC countries. It assesses the situation of public asset management in the region and presents a model with the core components of an efficient public asset management system. The second chapter presents an example of asset management transformation at the national level, describing the background and scope of the accounting and financial management reforms undertaken by the government of New Zealand three decades ago, which provided the framework for asset management at the national and local

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1. For example, a seminar entitled “Public Asset Management: International Best Practices” was held in the City of Buenos Aires in 2018 with the participation of authorities from different agencies responsible for the management of state assets in Latin America. It included presentations by the U. S. General Services Administration, Public Services Canada, and experts from Sweden and New Zealand, among others. Two seminars on “Digital Management of Public Assets: An Innovative Approach from Korea” were held in November 2020.



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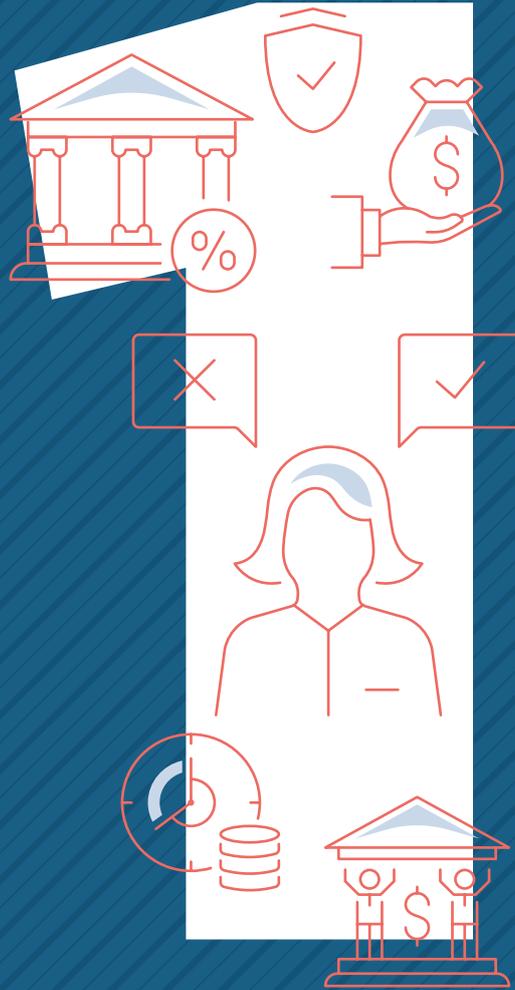
levels of government. The third chapter analyzes the implications of efficient asset management for local governments. It draws lessons from the success stories of Boston, London, Copenhagen, and Hong Kong, which have valued their commercial assets in ways that have helped them finance their investments. The chapter concludes with a proposal for the creation of urban wealth funds.

We hope that the studies contained in this publication will strengthen the awareness of the governments in the region of the importance of improving the management of their nonfinancial assets as a way to grow their economies.

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Toward Better Strategic Management of Public Assets in Latin America

Mauricio García Mejía, PhD - Olga Kaganova, PhD

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The Importance of Public Assets

In Latin America and the Caribbean, as in many other parts of the world, governments have historically accumulated large volumes of physical (i.e., nonfinancial) assets, such as land, buildings, and infrastructure. For example, 86 percent of the world's 3.9 billion hectares of forests are state-owned. Only recently has the sheer financial magnitude of these holdings and their associated liabilities come to the attention of governments.

According to an assessment conducted by the International Monetary Fund (IMF) in 2018, nonfinancial public assets correspond on average to 54 percent of countries' GDP (IMF, 2018a).² In 29 European Union member countries, this average was close to 70 percent, while the shares were especially high in former centrally planned economies—in the range of 200–300 percent of the country's GDP (European Union, 2018). On average, the value of States' nonfinancial assets in the

“An asset is an item, thing or entity that has actual or potential value to an organization.” ISO 55000:2014

IMF sample exceeds financial assets (the latter include government-owned enterprises or their shares),³ and financial and nonfinancial assets together exceed gross public debt. In addition, the stock of nonfinancial public assets (particularly infrastructure) of Latin American States grew a lot in recent years, due to the high levels of investment during the commodity boom. Thus, this issue should be of particular interest to the region. These numbers indicate that good management of public assets is critical to the economy. There is potential for financial and economic benefits if management is improved, a lost opportunity if the assets have never been well managed, and a risk of economic contraction if the quality of management worsens.

2. Excluding land and natural resources. The sample corresponds to 69 countries covering 87 percent of global GDP.

3. Financial assets account for 47 percent of GDP. See IMF (2018a) for more information.



“Organizations achieve their objectives through the effective and efficient management of their assets.”
ISO 5001:2014



Photography by Verticalarray Sergey Uryadnikov / Shutterstock.com

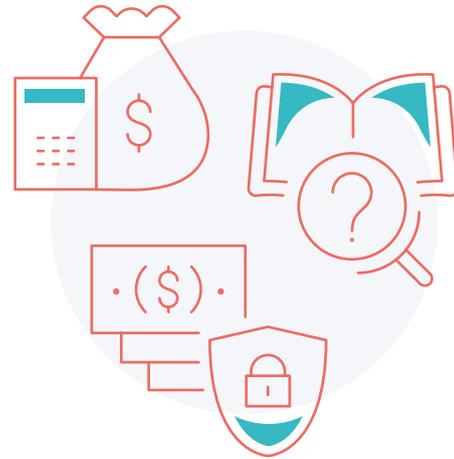
There is a growing recognition that the impacts of government nonfinancial asset management extend far beyond the internal workings of government, and that proper management is critical to the economic prosperity of nations and cities and to the quality of life of their citizens (Detter and Foster, 2015; 2017). The value of these public assets could reach extraordinary amounts if properly accounted for. Beyond the value of public investment or the intrinsic value of the associated infrastructure,

public assets contribute significantly to total factor productivity, meaning that they are used by economic actors in the production process. Thus, their real contribution to the national economy is greater than their book value. Infrastructure services are essential for businesses and individuals alike. They are indispensable inputs in production processes; supply problems, poor quality and unreliability directly influence costs and business competitiveness (Carvallo, Powell, and Serebrinsky, 2020).



There is a large theoretical and empirical literature on the link between public investment and economic growth. Much of this literature recognizes that this link can be positive due to its effect on total factor productivity (Straub, 2008). However, the economic impact of the quality of public asset management has received much less academic attention,⁴ despite the fact that it can be an important source of wealth.

However, there is a growing body of empirical data and research showing the significance of better asset management. For example, improved efficiency in the management of public assets in Korea has generated an annual increase of 36.7 percent in revenues from asset sales, 23.7 percent in rents, and 34.2 percent in fines for misuse of state property, which have implied new annual revenues for the State of nearly US\$873 million. According to the McKinsey Global Institute (2016), better strategic asset management can potentially reduce infrastructure investment needs by as much as 38 percent. In the same vein, repurposing government property for higher economic productivity—including decommissioned military bases, underused railroad lands, ports, and other



national holdings in desirable urban areas—can directly increase GDP (Grant and Skilling, 2014).

In addition, government buildings and infrastructure are associated with large and variable expense liabilities. Therefore, the net sum of these assets and liabilities could also be negative if not well managed. Typical expenditures include (i) payment of debt incurred to finance infrastructure construction and (ii) operation and maintenance (O&M) and recapitalization expenses related to buildings and infrastructure. However, even in advanced economies, governments often chronically underinvest in the maintenance of existing buildings and infrastructure, accumulating deferred maintenance, which leads to a premature decline in asset condition and increased future repair and replacement costs. The scale of this problem is often frightening. For example, the American Society of Civil Engineers estimates that the average condition of U.S. infrastructure is ‘low’ (D+) and that the cumulative investment gap constitutes approximately 45 percent of total

4. Several theoretical contributions have emphasized the importance of government spending on maintenance as one of the determinants of growth. In several models, the capital stock of the economy is determined by both new investment and the depreciation of existing investment, which the government slows down by spending on maintenance. The three most cited contributions are Rioja (2003), Kalaitzidakis and Kalyvitis (2004), and Agénor (2009). Unfortunately, the scant literature produced in this area is concentrated in a few advanced economies due to the lack of available data in the LAC region.



Photography by Branko Jovanovic / Shutterstock.com

estimated needs through 2025 if current trends continue (Infrastructure Report Card, 2017). This chronic underinvestment increased in many countries as a result of the 2008 global financial crisis (McKinsey Global Institute, 2016). The negative impact on public finances continues to be felt in many countries, including Germany, the United Kingdom, and the United States.

For countries that are undergoing rapid urbanization, a looming issue is how to finance and provide public infrastructure for urban growth. Overall, the majority of infrastructure investment needs—about 63 percent—are in emerging economies, with some of the largest spending gaps found in Brazil, Indonesia, and Mexico (McKinsey Global Institute, 2017).



Another important point to consider is that nonfinancial asset management should be at the heart of public administration in general, regardless of whether governments recognize this fact. Improving asset management

can lead to better results in many other areas of public management. For example, strategically managing nonfinancial assets will result in the achievement of tangible results, such as the following (Figure 1).

Figure 1. Benefits of Efficient Asset Management

Source: Authors' elaboration





Improved government financial performance, including increased revenues, reduced expenditures (without reducing the quality or quantity of services), and an improved balance sheet and fiscal stability.

Illustrative examples from the United Kingdom are discussed further in this paper. Another example is the U.S. Federal Assets Sale and Transfer Act of 2016, which reduces the costs of federal real estate by consolidating the footprint of federal buildings and facilities; maximizing the utilization rate of federal buildings and facilities; reducing reliance on leased space; selling or redeveloping underutilized high-value assets to obtain the highest and best value for the taxpayer and maximize the return to the taxpayer; reducing the operating and maintenance costs of federal civilian real properties; reducing redundancy, overlap, and costs associated with field offices; creating incentives for federal agencies to achieve greater efficiency in their inventories of civilian real property; facilitating and expediting the sale or disposal of unneeded federal civilian real properties; improving the efficiency of real property transfers for the provision of services to the homeless; and assisting federal agencies in achieving the government’s sustainability goals by reducing excess space, inventory, and energy consumption, as well as by leveraging new technologies.



Additional resources available for financing and infrastructure delivery,

such as additional revenues to spend on public capital investment, private sector participation in the delivery of public infrastructure, and others. The Volpe Transportation Center in Cambridge, MA, is an example of how creative asset management can unlock the potential value of property. The Volpe site was a sprawling campus of aging federal buildings and abundant surface parking on 14 acres in the heart of Kendall Square. Recognizing how its low-



density occupancy fell far short of highest and best use of this site, the government capitalized on its development potential by exchanging 11 acres to the highest bidder (in this case, the Massachusetts Institute of Technology (MIT)) and consolidating its future occupancy on the three acres that will remain under federal control. The deal would ultimately yield US\$750 million in value (Dong, 2017). The Exchange Agreement requires MIT to design and construct a state-of-the-art facility for the Department of Transportation on a portion of the property to be retained by the federal government. In exchange, the portion of the property no longer needed by the federal government will be conveyed to MIT after construction of the new facility (U.S. General Services Administration, undated).



Reducing infrastructure investment needs. According to McKinsey Global Institute, these investment needs can be reduced by an estimated 38 percent through three combined measures, all within the realm of asset management: (i) improving project selection and optimizing infrastructure portfolios, (ii) streamlining delivery, and (iii) making the most of existing assets (McKinsey Global Institute, 2016).



Reducing opportunities for corruption and conflict of interest, in particular, through greater transparency of rules and processes, as well as the use of competitive procedures when government agencies interact with the private sector, whether through the selection of a public–private partnership (PPP) or the leasing of office space.



Increased sustainability and climate resilience. For example, a recent study shows that the release of vacant or underutilized government-held land in prime locations in Riyadh, Saudi Arabia for private development can change the course of unsustainable urban sprawl taking place in the city (Malkawi, 2016). Another example is recent attempts to develop a methodology that includes climate resilience criteria in the prioritization of investment projects during public capital investment planning (World Bank, 2018).



Increased economic development. For example, decommissioned military bases in cities can be redeveloped for civilian urban uses. A similar paradigm is applicable to railroad land, ports, and other underutilized national properties in desirable urban areas. In general, improving the economic productivity of government-owned land and other nonfinancial assets contributes directly to increasing GDP (Grant and Skilling, 2014).



Improved service delivery to citizens. Several of the main service quality attributes (characteristics of services that affect user satisfaction) are related to assets in use, and thus fall within the scope of public asset management. They directly highlight quality attributes such as accessibility, comfort, and usability of citizen service centers. On the other hand, there is a growing realization that physical assets are a means to provide services to citizens and businesses even in the cases of energy, transportation, telecommunications, and water, where the management of infrastructure assets, the regulation and performance of the companies that manage them, and even consumer behavior are determinants of the availability and quality of services (Carvallo, Powell, and Serebrinsky, 2020).



Drivers of Change and Response Trends

Systemic changes in asset management globally have been the consequence of exogenous factors, mainly global economic changes, deteriorating environmental conditions, and changing paradigms in the way the State should function.⁵ This context suggests some drivers of change that shape reforms in the way public assets are managed. For analytical purposes, we have grouped them into six categories: cost reduction or revenue generation needs, environmental sustainability agendas, changes in the vision of the role of the State, the technological revolution and—resulting from this revolution—the emergence of new management practices such as the consolidation of services in the back and

front offices of the State, and the emerging lessons about best practices in asset management (Kaganova and Amoils, 2020).⁶

This analysis is important because there is a wide range of possible approaches that governments can follow to manage their nonfinancial assets, which depend on the driver of change behind the reform. Moreover, this is a new and very dynamic area of government management. Today, it is commonly recognized that governments have historically been inefficient asset managers and that, without true professionalization of this highly technical area, systemic improvements are not feasible. Therefore, identifying the main driver of change in a country at a given time is an important exercise because it will influence how asset management should be approached (the type of model chosen, strategic objectives, etc.), eventually triggering some typical responses:

5. This refers to the current transition from the reform paradigm proposed by New Public Management (NPM), which broadly proposed the unbundling of institutions, the promotion of competition mechanisms among service providers, and the use of incentives, to what has been called Digital Era Governance, which focuses on the reintegration of functions in the State, the adoption of holistic and needs-oriented structures, and on advancing in the digitalization of administrative processes. For more information, see Dunleavy et al. (2005).

6. This chapter closely overlaps with Kaganova and Amoils (2020).



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Austerity and Cost-Cutting Needs

These became especially pronounced and pressing as a result of the 2008 global financial crisis. Central governments came under pressure to (i) reduce annual operating and maintenance costs related to their property portfolios and (ii) convert nonfinancial assets into cash, all without a substantial reduction in public services or, in government parlance, “doing more for less.” This driver amplified and reinforced a number of positive trends, including the following:

1. Monitoring, benchmarking, and reducing office space consumption by government entities in many countries. For example, in the United Kingdom, space per person in 2016/17 was 9.9 m² per full-time employee (FTE), representing further reductions from the 2015/16 figure of 10.4 m²/ FTE and 13 m² / FTE in 2011/12. In addition, the vacancy rate in central government properties fell by 40 percent in five years (from 2012 to 2017) and in 2017 was only 1.5 percent of floor space, significantly below the private sector rate (HM Government, 2013).



2. Monitoring, benchmarking, and reducing annual property-related costs. This includes reducing operating and maintenance costs by (i) improving the energy efficiency of government buildings and vehicle fleets, (ii) consolidating agencies into fewer buildings, resulting in shared costs for many functions, and (iii) reducing the size of the government's property portfolio. For example, in a single fiscal year, from 2015/16 to 2016/17, the UK portfolio decreased by 100,000 square meters—the equivalent of 435 tennis courts (HM Government, 2016–17). Terminating costly leases with private landlords brought about cost reductions.
3. Strategic restructuring and rationalization of the overall land and building portfolio. A central concept underlying such restructuring is that the government should own only those properties necessary for its current and planned operations. This, in turn, implies that historically accumulated property portfolios should be converted into portfolios that are well aligned with specific missions and mandates of government agencies. This generally begins with the disposal of vacant or underutilized properties. For example, the UK government reduced the size of its property portfolio by 22 percent between 2010 and 2014/15 (HM Government, 2016–17).

Monetization of non-strategic assets of state-owned companies:
Land and buildings that are not needed for the operations of government-owned enterprises (e.g., enterprises that manage ports, airports, railroads, etc.) are sold and the proceeds from the sale are reinvested (“recycled”) in new infrastructure.

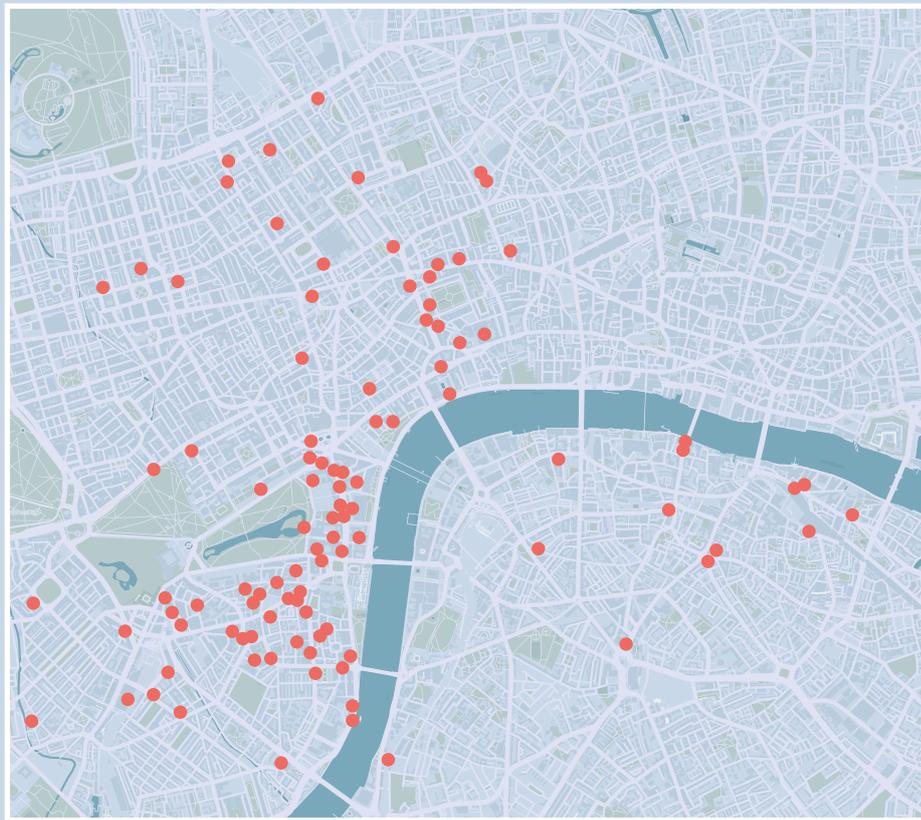
Another measure was the relocation of government agencies from prime locations to less costly ones, including outside London. Between 2012 and 2016, the number of government buildings in central London was reduced from 126 to 63 (NAO, 2017). The intention is to further reduce this number to around 20 buildings by 2025, as illustrated in Figure 2.

In a new manifestation of this trend, government agencies from different levels of government are housed in the same building. For example, the UK central government aggressively promotes this concept through its “One Public Estate” initiative, which is voluntary for municipalities, although 95 percent of them have reportedly joined the initiative.



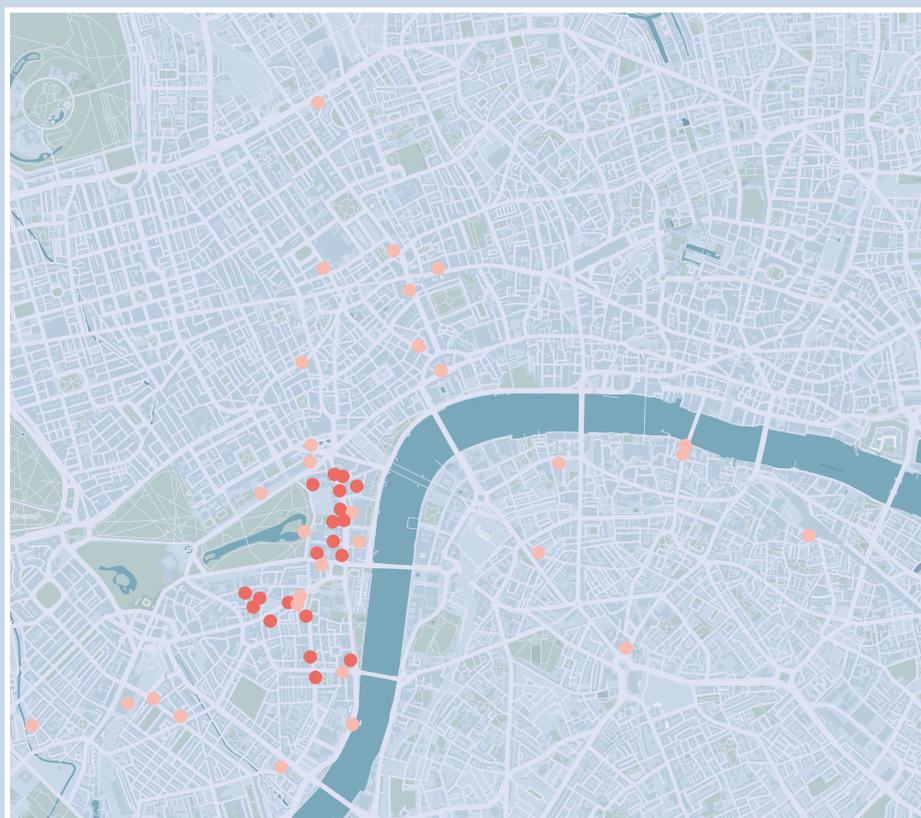
Figure 2. Rationalization of Government Offices:
Government Proposals in Central London, 2012 and 2016

Source: National Audit Office analysis of Government Property Unit data



Government estate in 2012.

■ Government estate in 2012



Reduction in the number of government buildings in central London. Number halved between 2012 and 2016.

Government estate in 2016.

■ Planned government estate in 2020
■ Government estate to be disposed of from 2016



Similarly, in Ecuador, the government promoted a broad process of administrative deconcentration based on a new zoning of the territory (Government of Ecuador, undated). This new way of planning the provision of public services throughout the country led to the closing of several offices, the expansion of some, and the opening of new points of service in different locations, changing the need for properties throughout the territory for government operations.



1. However, disposal of unnecessary properties is not always successful and or as quick as expected. For example, the Italian government plans to sell public properties for about US\$2.1 billion to reduce its debt. However, it may face difficulties in selling its portfolio of unused properties (e.g., former army barracks, hospitals, and office buildings) to meet public revenue targets. Experts explain that the achievement of aggressive asset sales revenue-generation targets may be undermined when large volumes of real estate are put on the market and cannot be absorbed, as well as by complex procedures for land rezoning, changing the possible uses of land in different areas of a city (Sirletti and Totaro, 2019).

2. More efficient and transparent financial management of land and buildings controlled by specialized agencies, such as departments of defense. For example, in the United Kingdom, the Ministry of Defense has financial requirements similar to those established for other ministries, such as the amount of revenue it needs to receive from the disposal of surplus land and the planned reduction of operating and maintenance costs (NAO, 2016).

3. Monetization of non-strategic assets of state-owned enterprises. The concept is similar to the above: that land and buildings that are not needed for the operations of government-owned enterprises should be required to be sold and the proceeds reinvested (“recycled”) in new infrastructure. This idea is not new,



but it often requires strong political will to implement. India (Bloombergquint, 2018) provides a recent example. It introduced and began implementing such a policy starting in the early 2010s. A state-owned airline, Air India, has been auctioning its non-core assets, such as residential and commercial properties across the country and abroad, since 2013, as part of its 10-year restructuring and turnaround plan (LiveMint, 2018).

Streamline, optimize, and integrate property management operations to improve efficiency. This overlaps with the aforementioned rationalization of real estate portfolios. However, this also includes significant efforts to improve the organizational aspects of asset and property management and to enhance the professionalism of asset managers. How to go about these efforts, however, has been the subject of much experimentation and debate. Approaches have included centralization of the asset management function (e.g., in the United Kingdom, with the inception of the Government Property Unit in 2010, which morphed into the Government Property Office and Government Property Agency in 2018); the creation of government corporations (e.g., Canada has experimented a lot with this approach); and outsourcing various parts of asset and facilities man-

Unfortunately, in Latin America and the Caribbean, the management of non-financial public assets has failed to generate the potential benefits that society could expect.

agement and related functions to the private sector (e.g., Australia, Canada's Infrastructure Ontario, etc.).

4. Sharing space (land, building) with a private sector partner (Figure 3). In some countries, however, land use zoning does not allow such sharing.

Some of the above approaches, when combined, result in *intensification of land uses on government-owned land* and increased productivity of this land (Kaganova, 2020). Figure 3 depicts an example from The Hague. A section on consolidation below presents examples from the level of central governments. Such intensification results in substantial savings on construction and operations and maintenance costs for governments, reduced land consumption for governmental uses, and financial and economic gains from releasing vacated land for private activities.



Figure 3. Example of Combined Public and Private Uses, The Hague (The Netherlands)

Note: The building houses district administration, library, police station, and a private supermarket.



Maps data: Google, ©2021/ The Hague, South Holland, oct 2020 / <https://bit.ly/3zXBR2Q>



Unfortunately, fiscal pressure and the drive for austerity have also had multiple negative implications for government asset management. These include an increased use of short-term solutions that end up generating very negative impacts in the medium and long term, which include:

1. Distress sales, or fire sales (i.e., quick sales at greatly reduced prices) of government land and buildings at the bottom end of the real estate market. During or immediately after the global financial crisis, many governments, both central (e.g., France, Germany, Ireland, the United Kingdom, and the United States) and subnational, resorted to this desperate measure, foregoing revenues that could have been obtained by waiting until the real estate market was more favorable (Kaganova, 2010/2011). In addition, properties disposed of in distress sales are often selected at random,

without strategic planning or sufficient professional considerations, leading to increased future public costs (Kaganova, 2010/2011). Asset valuations are also highly volatile and can be highly correlated with the economic cycle, meaning that their values may be at their lowest when financing needs are most urgent (IMF, 2018).

2. Overselling government property and using leases. The idea of selling government property and leasing it to a new private owner became especially popular after the 2008 financial crisis, as such sales can provide an immediate, one-time cash infusion. However, these transactions can be substantially more expensive for taxpayers in the long run if they are not structured properly (in other words, the cumulative cost of the lease can be much higher than the cost of ownership).
3. Use of sale proceeds to patch operating budget deficits. This is very poor public policy, as it generates one-time revenues with no lasting results. Within the scope of responsible and prudent asset management, proceeds from the sale of nonfinancial assets should be spent on capital investment, repayment of long-term debt, or financing systemic reforms (Peterson and Kaganova, 2010).



4. “Respectful neglect.” The term was coined by managers of a Canadian federal agency. It implies that the agency simply stops spending on the maintenance of a property due to lack of funds. In other words, austerity measures often increase and accelerate already existing underinvestment in property maintenance and repair.
5. Negative impact on subnational governments. Budget reductions at the central government level often translate into reduced intergovernmental transfers to local governments, further reducing funding for local asset management. There are examples where the magnitude of the reduction can be catastrophic. For example, in the United Kingdom, central funding to local governments was expected to fall by 77 percent by 2020, generating a funding gap of £5.8 billion (Metcalf, 2018).

Moreover, as the British National Audit Office indicated in its audits of two agencies, HM Revenue and Customs and the Ministry of Defense, political pressure to achieve austerity outcomes can lead to unrealistic and optimistic estimates of potential sales revenue and operating and maintenance savings (NAO, 2016). In addition, reform

plans overestimate the pace at which these benefits will be realized. In the case of the Ministry of Defense, an overly optimistic financial forecast, coupled with flawed outsourcing aimed at achieving savings, resulted in a high risk of real estate assets compromising military capability.

Environmental Sustainability Agendas

Within public asset management, concern for the government’s environmental footprint has led to the “greening” of government assets, through improving the energy efficiency of buildings, reducing CO₂ emissions, and applying Leadership in Energy and Environmental Design (LEED) standards to buildings. In addition, there are examples of government asset management that promote environmental agendas beyond the government assets themselves. For example, the sustainable government corporation Canada Lands Company is seeking LEED certification for entire neighborhoods as part of development projects the company is preparing. In British Columbia, Canada, when the provincial government introduced a new environmental sustainability law, it began implementing the standard on government assets, giving the private sector a grace period of a few years to comply.



Photography by Javier Crespo / Shutterstock.com

The Vision of the Role of the State

Political agendas have always had a notable impact on asset management in the State. In essence, many important decisions are driven by changes in prevailing ideologies or policies, decisions that ultimately may not be in the long-term interest of taxpayers, even if on the surface they appear justified. For example, privatization was one of the pillars of the sweeping government reform that took place in Australia between 1980 and 1990, which sought greater efficiency through competitiveness in the public sector. As part of this reform, most of the federal government's office building portfolio was privatized, and government agencies shifted to predominantly leased space (95 percent of the total, by the late 2000s). Long after the privatization of this portfolio, it was recognized that the cost of leasing can be higher than long-term ownership. The opposite case is that of exces-

sive nationalization of asset management when the experience of direct management of infrastructure maintenance and rehabilitation through administrative and/or traditional contracting modalities has been quite ineffective on average. In these cases, it is common to observe a lack of proper budgeting, neglect, and/or delays in infrastructure maintenance and rehabilitation, cost overruns associated with poor use, and evaluation of inputs and questionable unit prices, all converging to a systemic deterioration of the infrastructure. Detter and Folster (2015) provide many examples of the negative impacts of political interference in the management of government assets.

Is corporatization of government assets a way forward? Detter and Folster argue that corporatization of government asset management, if accompanied by good governance, can protect asset management from political interference and generally



improve its efficiency and effectiveness. There are examples to support this view. Unfortunately, there are also multiple experiences of corporatization of government asset management that demonstrate that it is not a panacea for political influence. For example, some asset management corporations in Canada still proved to be susceptible to political influence (McKellar, 2006). In summary, there is no consensus on this issue.

Another possible tool to insulate the management of government assets from political interference may be their outsourcing to private sector contractors. However, whether outsourcing is an effective nonpartisan tool for managing government assets needs further study. Australia, where various forms of outsourcing have been tried for a long time, could serve as a case study. Currently, there are three private companies, including Jones Lang LaSalle, that provide leasing and facilities management services to more than 90 Commonwealth entities.⁷

Information and Communications Technologies

The technological revolution opens up a world of possibilities of doing more/better with less, but these opportunities

must be seized. They must also be used to respond to the other drivers of change described here. The information technology revolution has had a profound and multifaceted impact on the management of government assets.

A major advance has been the creation and use of map-based electronic databases of government property and infrastructure, which allow for improved inventory and management. In the best of cases, driven by increased citizen demand for transparency in the management of public resources, such databases are publicly accessible. This is exemplified by the federal real estate directory in Canada, which is the federal government's central real estate system. It contains standardized property data for 71 custodial organizations, including 20,128 owned and leased properties, 39,552,192 hectares of land, 36,862 buildings, and 27,477,420 square meters of living space.⁸ However, a common mistake governments make is to create property databases without strong involvement of asset managers as potential clients, that is, without knowing how and for what purposes the database will be used. Another mistake governments make is trying to create a "database for everything," i.e., targeting too many potential uses of the database at once.

7. <https://www.financeminister.gov.au/media-release/2017/09/15/australian-government-delivers-property-management-efficiencies>

8. <https://www.tbs-sct.gc.ca/dfrp-rbif/home-accueil-eng.aspx>




Box 1.

How IT Transforms Asset Management: The Case of Korea

-  **Improving asset supervision capacity:** KAMCO operates an unmanned aerial vehicle (UAV) site inspection system that flies along pre-established routes conducting a comprehensive inspection of state assets. UAVs eliminate errors such as camera distortion compared to conventional aerial photographs and corrects GPS errors compared to aerial images that are approximately 30 times more accurate than aviation video resolution as seen in Figure 4. By using such drones, KAMCO has so far completed an investigation on 820,000 combined general and administrative properties and has helped generate national financial income through leasing and sale by converting idle and unused administrative properties into general properties.

 -  **Improving transparency:** OnBid is a state electronic asset disposition system that supports the disposal and leasing of real estate and property by public institutions through tenders. OnBid is a unique public auction system in Korea that provides real-time information on asset disposition, as well as bids from public government institutions, local governments, public educational institutions, and public corporations. Through this system, the entire process of public bidding, tendering, and electronic contracting is carried out as a transparent and comprehensive service.

 -  **Improving data accuracy, convenience and efficiency, and state property management integration:** Having automated most of its business processes and increased real-time data entry through internal and external system links, problems of limited access to work and flaws in the security of documentary information have been resolved. The integration of different state information systems, such as the State Property Management System (BPM) that automates KAMCO's main business processes, the Digital Budget Management System (D-Brain) of the Ministry of Finance, the State-owned Geographic Information System (GIS), the electronic asset disposition system (OnBid), and many other public and private information systems has radically transformed how Korea manages its assets.
-



Figure 4. UAV versus conventional aerial images.

Source: Image composition provided by KAMCO.



But the deepest change comes about when improved information on assets is combined with process automation, integration between information systems, and other technologies such as GIS or UAVs, as exemplified by the case of the Korean Asset Management Corporation (KAMCO) (Box 1).

Another fundamental change in asset management brought about by the technological revolution is a change in the way people work. In particular, telecommuting (particularly significant during and after the COVID-19 pandemic), telecommunication and, in addition, better analysis of the workspace needs of staff and contractors resulted in a reduction in the overall space needed by government agencies. In addition, the greater availability of online services for citizens has altered the demand for physical space previously used for citizen services. However, despite this clear trend toward the digitalization of the services provided by the State to citizens, in Latin America 90 percent of government transactions are still carried out in person

(Roseth, Reyes, and Santiso, 2018). This means that the face-to-face or physical channel must receive a lot of attention from the State if it wants to maintain high levels of satisfaction with the services it provides to citizens.

Consolidation as a Management Practice in Government

One of the trend-setting strategies, in line with what the Digital Age Governance model proposes, has been a renewed interest in consolidation as a response to the problem of government fragmentation. Examples include:

1. Consolidation of public offices in government centers as a measure to generate efficiency and improve inter-institutional coordination. Some examples of co-location of administrative offices are the Government Platforms for Social Management and Financial Management in Ecuador (Figure 6), or the Cidade Administrativa of the State of Minas Gerais



Figure 5. Cidade Administrativa Presidente Tancredo Neves, Government of Minas Gerais, Brazil



Photography by Ronaldo Almeida / Shutterstock.com

in Brazil (Figure 5). In the latter case, the state government originally estimated annual savings of approximately US\$39 million, but by 2013 and 2014 they had verified savings of approximately US\$54 million and US\$51 million per year, respectively. Partially originated by the cost reduction needs mentioned above, the physical grouping of institutions and officials also brings other benefits. In this regard, the literature suggests that physical proximity facilitates inter-institutional work by improving communication, information exchange, and trust building, fostering a culture of working together (Multi-Agency Working and Information Sharing Project, 2013). All this results in greater efficiency and effectiveness in decision making, as well as higher productivity (Mendonça et al., 2010).

2. A generalized process of government reforms with the citizen at the center that shifts the demand from dispersed points of attention to consolidated citizen service centers. Examples include Service Canada, Services Australia, Chile Atiende, the Citizen Service Centers in Ecuador (Figure 7), and the Specialized District Service Centers (CADE) in Colombia. An impact evaluation of the Integrated Service Center (CIS) in the Municipality of Chaparral, Colombia (Figure 8), which consolidates the provision of public services from various entities under one roof, found that it has had a positive impact on the availability, efficiency, and quality of service delivery, resulting in a significant increase in citizen satisfaction (Cano, Roseth, and Reyes, 2020).



Figure 6. Government Financial Platform, Quito (Ecuador)

Note: Photo provided by Verónica Rodríguez, Project Manager, INMOBILIAR. *The building houses administrative offices of 23 public institutions from the financial sector, but also private restaurants, stores, a gym, and a supermarket. On the first floor it also houses 120 customer service windows that served 6,000 customers daily before the pandemic. Overall, 8,000 people visited the Platform daily.*



Figure 7. Citizen Service Center, Portoviejo (Ecuador)

Note: INMOBILIAR. *The Center houses 124 service windows of 22 public institutions from different sectors of government. Before the pandemic It received 108.000 costumers per year.*





Figure 8. Integrated Service Center of Chaparral (Colombia)

Source: Photo provided by Joel Korn.



3. Consolidation of administrative tasks in shared service centers. These are units that provide services to more than one government unit (OECD, 2010), taking advantage of economies of scale. They provide services of various kinds, such as financial (accounting, payments), human resources (salaries, pensions), information and communication technologies (ICT) (application development, data centers), public procurement, vehicle fleet management, and facilities (buildings, etc.). They have helped reduce the cost of administrative functions and improve the quality of services.

Learning and Knowledge Sharing within the Government Asset Management Sector

There is a growing professional infrastructure of knowledge production and sharing in government asset management (Kaganova, 2018). This phenomenon has contributed to the professionalization of the sector and more efficient management. However, its greatest impact has been at the professional technical level and not necessarily at the political level to trigger a systemic reform of government asset management.



In some countries, specialized membership organizations exist for government asset management entities, such as the National Executive Forum on Public Property in Canada or a real estate branch in the Chartered Institute of Public Finance and Accountancy (CIPFA) in the United Kingdom. In countries where these organizations exist, they serve as an engine for formulating and exchanging professional knowledge. They also create networking opportunities for informal communication among members. In addition, there are international membership organizations for government entities (e.g., PuRE-Net and The Workplace Network), and the Red de Administradores de Patrimonio Público de América Latina (RAPPAL) that perform similar functions across borders for central government entities. Unfortunately, most of the knowledge and data accumulated within member organizations is for internal use only, because members are very sensitive to the disclosure of their data (or lack thereof) and their specific problems.

Government audit and oversight bodies in several countries, such as the Government Audit Office in the United Kingdom (NAO) and the General Accountability Office (GAO) in the United States, have played a crucial role in highlighting the importance of properly managing capital assets. These entities have not only investigated the state of affairs and identified problems, but have also suggested possible solutions, which have served as catalysts for future reforms.



Professional associations and societies, such as the Royal Institution of Chartered Surveyors (RICS) in the United Kingdom, the American Society of Civil Engineers (ASCE), the Transportation Research Board of the National Academies in the United States, and the Federation of Canadian Municipalities and the National Research Council of Canada, provide some assessment, research, and guidance on various asset management topics. International donor organizations, such as the Asian Development Bank, the Inter-American Development Bank, and the World Bank, sponsor the development of various asset management guidance documents.

Finally, the private consulting industry increasingly recognizes government asset management as a business niche, and many firms are positioning themselves by publishing technical and policy briefs, and sometimes more substantive research. However, most research, methodologies, and recommendations from private firms remain confidential.



Where Do We Start from in Latin America?

In many LAC countries, the management of public assets has not yet succeeded in generating the potential benefits that society could expect. The lack of systematic assessments, explicit policies, adequate asset information, management and technological tools, and obsolete regulatory and governance frameworks limit the economic and social impact of these assets.

Limitations can be observed in the different stages of public heritage management. They originate from a failure to prioritize asset management at a high political level and the absence of related clear policies. In practice, cadastral records are of poor quality, there are few parameters for the construction, planning, use, maintenance, and renovation of the assets, and there are no objective criteria to support decision making on the allocation, use, and disposal of assets, their valuation, operation, and accounting, among others.

Following are additional details about the problems facing the region with respect to asset management:

The first is that **efficient asset management is not normally included in national priorities**. The low priority assigned to this issue at the national level and the lack of specific national policies are directly reflected in the low budgets allocated for asset management. According to the sectoral literature, most governments over-budget for new investment at the expense of optimal maintenance spending, probably because of political decisions about cost-effectiveness. For example, the share of government spending allocated to asset maintenance has historically been low, much lower than optimal, and has been further cut after the adverse fiscal shock of recent years.⁹

The problem is that cutting preventive maintenance spending on assets anticipates the need to replace existing infra-

9. For example, between 2008 and 2014 the resources of the Ecuadorian General State Budget allocated to maintenance increased from 0.16 percent of GDP to about 0.47 percent of GDP, to fall in 2015 due to the oil shock to 0.35 percent of GDP. Although there is no consensus on this, Rioja (2003) argues that the optimal level of maintenance spending is close to 2 percent of GDP. See Díaz-Cassou and Ruiz-Arranz (2019) for more information.



Photography by Gena Melendrez / Shutterstock.com

structure and generates additional costs to replace it, because maintenance spending slows the rate of asset depreciation. In line with the above, the IMF (2014b) has drawn attention to the fact that maintenance spending has a high rate of return. It also finds that national authorities tend to reduce maintenance spending in situations of fiscal stress, despite the fact that such cuts do not constitute real fiscal savings since they increase infrastructure repair costs in the medium and long term.

Increasing the transparency of information on maintenance spending would help citizens to have a voice in public decisions on maintenance vs. new construction. Good

political management of the issue could help to involve the community in asset conservation. For example, the innovative “My Mexico” Program¹⁰ designed by the National Institute of Management and Valuation of National Assets (Instituto de Administración y Avalúo de Bienes Nacionales, or INDAABIN) shows how society can be engaged in the stewardship of public heritage, assuming some concrete commitments regarding its protection and use.

10. The program included activities such as school fairs, Urban Art contests aimed at young people, caricature making, among other activities. <https://www.gob.mx/indaabin/es/articulos/diferentes-instituciones-se-unen-para-conocer-valorar-y-proteger-el-patrimonio-inmobiliario-de-nuestra-nacion?idiom=es>



The problem of the lack of political prioritization of the issue has other consequences. For example, it weakens the position of the entities in charge of the administration of public heritage in the face of disputes over invasions of state land. This has led, in some cases, to entities choosing not to publish information on unoccupied public properties so that they are not invaded (illegally occupied) by third parties, as they fear that they will not have the possibility of recovering them for the State. Moreover, the lack of explicit high-profile priorities and policies makes it difficult to develop and implement strategic government-wide rationalization of property holdings.

The second factor is fragmentation and great heterogeneity in the way that assets are managed. There is a **wide dispersion of criteria, instruments and responsibilities, as well as different professional profiles in charge of asset management in the different public entities, which leads to a high degree of discretion in this task.** In many

cases the lack of clear policies leads to the absence of legal frameworks that require and support efficient asset management. Several LAC countries lack consolidated general governance schemes that promote efficient management of these assets,¹¹ nor do the entities have sustainability and maintenance plans for the provision of services under their jurisdiction. Worse still, there are no defined processes for maintenance of the service delivery infrastructure, and the technological support systems are quite limited and with little interoperability with other systems. In many cases, the processes are manual. These problems are further exacerbated by the fact that many governments do not have proper records of operation and maintenance (O&M) expenses at the property level. Thus, there is no ability to monitor the results of spending or to report it to the public.

However, there have been important advances. An example is SPUNet, developed by the Secretariat for National Assets

11. Some countries in the region are trying to develop more general governance schemes for assets. Peru, for example, is developing a national supply system through Legislative Decree 1439 of September 2018, which contains the regulatory framework governing the public supply chain. This comprises: (i) the Multiannual Programming of Goods, Services and Works, including the management of the Multiannual Needs Chart; (ii) Procurement Management, including the management of contracting, registration and monitoring of contracts; (iii) the Administration of Movable Goods, including the management of storage, distribution and final disposal; and (iv) the Administration of Real Estate.



Photography by Luz Zuluaga Photography / Shutterstock.com

(*Secretaria do Patrimônio da União*, or SPU) in Brazil, which consolidated different existing systems and automated critical heritage management processes such as the incorporation of areas and properties (physical registry), processing and administration of geo-information, customer

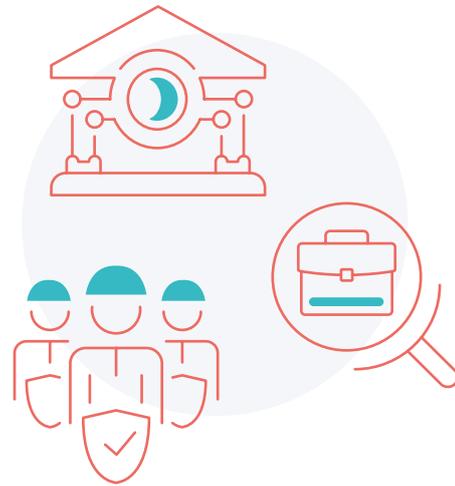
service, property allocation, evaluation and accounting, capital income, and inspection and control.¹²

12. According to SPU data, SPUnet raised more than R\$57 million. <http://www2.planejamento.gov.br/planejamento/assuntos/gestao/patrimonio-da-uniao/spunet>



The absence of formalized models for the management of commonly used and specialized assets¹³ prevents them from being properly managed and their compliance and efficiency from being measured and improved. In practice, the entities in charge of asset management in many countries only have a registration role, not a management efficiency role. This has led to asset management being reactive and no prospective analysis of needs. This analysis is left to each entity, making it difficult to have a consolidated view of asset availability vs. demand in the countries.

An example of the formalization of criteria for asset management that allows for a consolidated vision of the patrimony can



be observed in Mexico. INDAABIN developed a model to identify the best use and occupancy of federal property based on its physical characteristics, location, and development potential (Figure 9), to improve the decision-making process. If the context permits, the model would allow its use to be changed to a more profitable one.

The third systemic problem is the **low quality of the information available for decision making**. Information on assets is only partially recorded and is usually not updated. Often it consists of records self-reported by the entities without verification mechanisms and is kept in Excel files. The problem of lack of information is so significant that many countries do not have a complete cadaster or inventory of their assets with all their characteristics (exact location, dimensions, state of conservation, current occupancy level, etc.) and potential uses (administrative, commercial, public, etc.). Nor are there defined criteria for the valuation of assets in most cases.

13. There are different types of assets that require different management models. For example, Korea distinguishes between administrative and non-administrative property. Administrative property is classified into those for official use (those used by the government for offices, projects, schools, residences of officials, government complexes, etc.), public use (roads, rivers, ports, airports), public enterprises (those using state-owned property such as post offices, etc.), and preservation (those such as properties with cultural value, historical sites, etc.). An example of a specialized management model for an asset type might be vehicles. The General Services Administration (GSA) manages most of the (non-military) vehicle fleet of the Federal Government of the United States of America. It does so with a mechanism of leasing vehicles to the entities, assigning them according to their needs, integrated with vehicle purchase/sale models, maintenance in authorized workshops with expert advisors depending on the type of maintenance required, fuel supply systems that allow analyzing fuel consumption efficiency and determining deviations suspected of fraud or mechanical problems that require immediate maintenance, and a strong emphasis on data analysis capabilities. All this has enabled them to have a more efficient and modern vehicle fleet. For another possible typology of assets and management models, see Appendix 1.



Figure 9. INDAABIN Strategic Prioritization Matrix

Source: INDAABIN (2015). "New Model of Real Estate Intelligence in Mexico." Presentation to TWN.



Notes

* This may include disposal, lease, concession, property exchange, or public-private participation.

** The use can be maintained with improvements when necessary, or the asset can be disposed of to the private sector, assigned for use to NGOs or civil associations, donation to vulnerable groups, academic institutions, or research centers.

When such a cadaster exists, assets are valued at purchase price in the best of cases. This makes decision making difficult because many of these assets are very old, they have been revised, or they have been damaged by use. At the same time, the value of a land site could increase multifold because of its location. Therefore, these values are not accurate. For example, upon incorporation assets

are not measured at cost (purchase price and all costs directly attributable to the acquisition), assets acquired through non-exchange transactions are not measured at fair value, after initial recognition neither the cost model nor the revaluation model is applied, depreciation is not charged systematically over the useful life, and assets are not derecognized upon disposal.



Toward Professional Management of Public Assets

In the private sector, assets exist to provide value to organizations and their stakeholders. Therefore, their management must be aligned with organizational objectives, and must be conducted in such a way as to ensure that they fulfill their purpose (ISO 55,000 2014). Objectives for government-owned property assets are more diverse and less homogeneous than in the private sector. Specifically, assets are usually subject to various mandatory requirements, used to deliver public services, are considered instruments of public policy and often have high levels of deferred maintenance (Kaganova and Amoils, 2020).

Implementing an asset management system would help countries and government entities to direct, coordinate, and control their asset management activities and manage risks, providing objectives that are aligned

with organizational and government objectives in general (financial, quality of service, environmental, transparency, institutional efficiency, etc.). As a former commissioner of the Public Buildings Service of the U.S. GSA proclaimed, “real estate should be a means to an end, and not an end unto itself. Those of us who have worked on the government side of real estate sometimes become too enamored with the size and complexity of the portfolio, focusing on the number of assets or the amount of square footage under our control. When we see this happening, we need to step back and ask what we are ultimately trying to achieve. Portfolio managers should recognize that their mandate is not to own real estate for the sake of owning real estate, but to support tenant agencies in fulfilling their program mission. Understanding this broader objective would allow for a more



thorough consideration of options to meet the agency space requirement and would result in more effective property management” (Dong, 2017).

A public asset management system would provide answers to some critical questions about the State’s assets, such as:

1. What assets are in the government’s possession and where are they located? (inventory)
2. What is their value? (Costs / replacement rates)
3. What is its condition and remaining useful life? (Condition and capacity analysis)
4. What is the annual cost of this asset? (O&M expenses, required and actual)
5. What is the asset used for? (Administrative use, commercial, public service, etc.)
6. Is it advisable to keep the asset in state ownership or is it better to dispose of it?
7. What is the level of service expected from the asset and what needs to be done to achieve it? (investment and operating plans)
8. When is it necessary to invest in a new asset or to maintain it? (investment and operational plans)
9. What is the level of acceptable risk in terms of financial, health and safety, reputational, environmental, and social impact? What is the business continuity and response plan in case of emergency?
10. How is the long-term availability of the asset ensured? (short- and long-term financial plan)

ASSET MANAGEMENT SYSTEM

An asset management system is a set of interrelated and interacting elements of an organization whose function is to establish the asset management policy and asset management objectives, and the processes, necessary to achieve those objectives. In this context, the elements of the asset management system should be viewed as a set of tools, including policies, plans, business processes and information systems, which are integrated to ensure that asset management activities will be carried out.

Asset management requires accurate information about assets, but an asset management system is more than a management information system. Asset management interacts with many functions of an organization.

ISO 55001:2014

A review of specialized literature, international standards such as ISO 55000, and the Bank’s experience in the region



Figure 10. Components of a Public Asset Management System

Source: Authors' elaboration



reveals the six core components that an efficient public asset management system should have. It is important that these components are clearly developed and consistent and that they apply to both the life cycle of specific assets and portfolio-level management. To illustrate the importance of consistency, consider a very practical governance issue: the mandate and re-

sponsibilities of an asset management organization should be matched by sufficient funds to carry them out. If there is a mismatch between responsibilities and funding, governance has an internal conflict, and an organization's performance under such conflicting rules will suffer. Figure 10 depicts the six components of a public asset management system.



Governance: Policies, Regulations, and Institutional Framework

An overall asset management policy, supported by the corresponding regulatory framework, defines the principles to be applied to state asset management to achieve national objectives. For example, the enactment of the State Property Law in Korea in 1950 was an expression of the policies related to state property. The Act includes all principles of state property management and disposal, establishing relationships between ministries and state property management agencies, specifying various systems related to state property and procedures and methods of disposal and leasing.

The mechanism through which these policies are implemented at the institutional level are the strategic asset management plans. However, development and implementation of such plans usually takes 5 to 10 years, so this process is shown on Figure 10 as a separate element of asset management.

Clear governance of public asset management facilitates linkage among the actors that have an interest and influence on the subject. An entity or area responsible for the coordination and supervision of this process that involves so many other entities is required. It must have the leadership, clearly defined authority, standard

operating procedures and adequate organizational structure, financing, and technological resources to support this complex function.

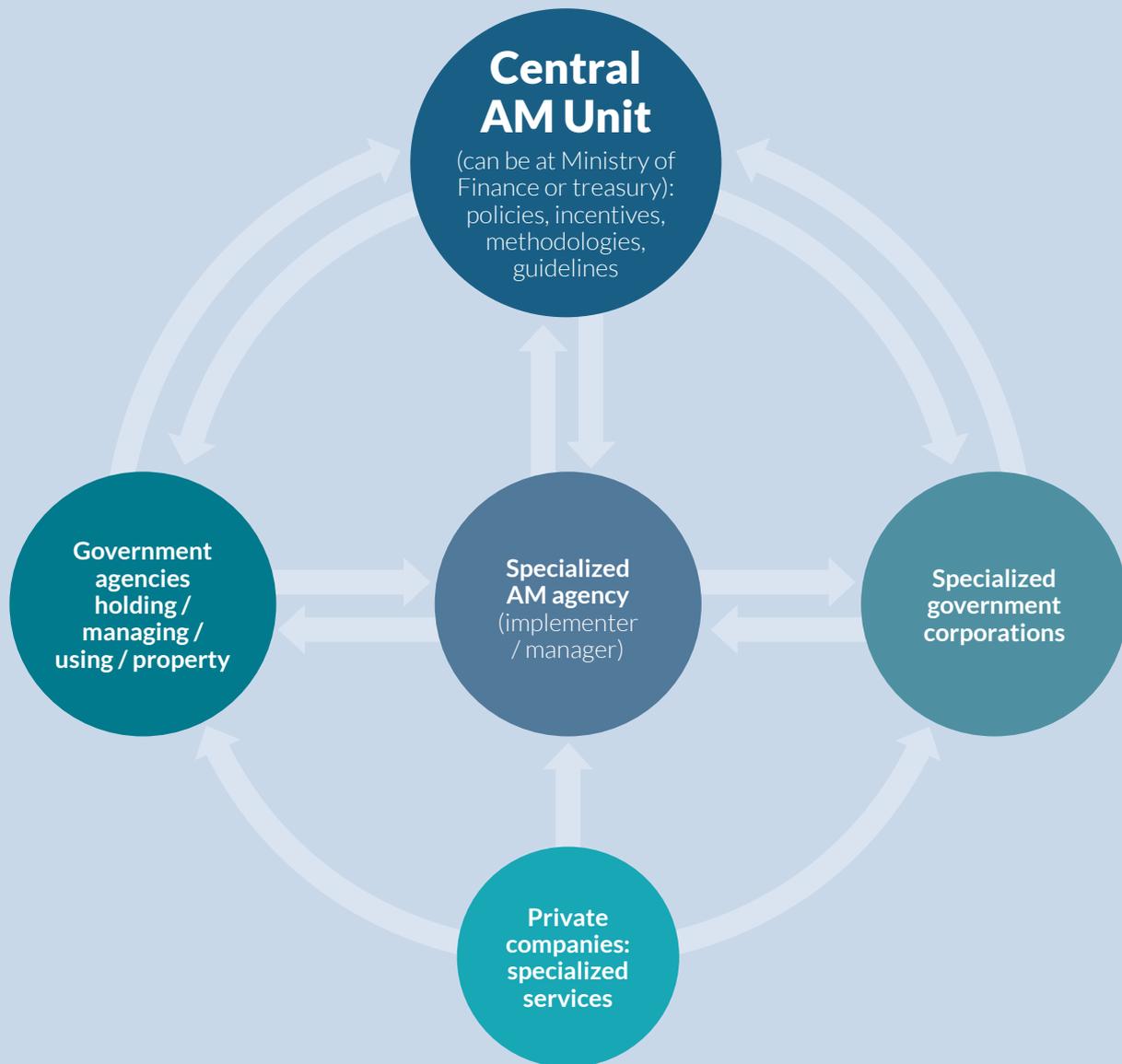
There is wide diversity in the models used to organize public asset management internationally; no single model can be expected to become a universal solution. In practice, modern organizational schemes often include complex conglomerates of several entities performing various functions related to asset and property management. Two basic models can be identified, with many variations and hybrids between them.

Model 1. Government Agency. This model, shown schematically in Figure 11, reflects practices in at least 25 countries, including Australia, Brazil, Canada, Ecuador, Indonesia, Japan, Mexico, the Republic of Korea, the United Kingdom, and the United States. Here, a government agency leads asset management policy, while its specific responsibilities may vary. For example, in Canada, the Treasury Board Secretariat is responsible for asset management policies, regulations, incentives, and the federally owned database. A specialized government asset management implementation agency may or may not exist. Where it exists, it may act as a general asset and property manager for other agencies. In Canada, this is Public Services and Procurement Canada. Regular government agencies (e.g., line ministries) may be tenants of properties managed by this specialized asset management agency, but in other cases may



Figure 11. Model 1. Government Agency

Source: Author's extraction from TWN & PuRENet 2013 survey and Australian Government Materials, Department of Finance.



manage their property portfolios themselves, following rules established by the central asset management unit. Public companies may manage specialized portfolios (e.g., surplus property, mail service, airports, etc.). Private companies may also provide a range of specialized services. The objectives of this model are to (i) consolidate policy, guidance, monitoring and incentives in one entity and place operations

in another, and (ii) overcome the duplication and fragmentation in operations that occurs without policy centralization and operational coordination.

A common weakness of Model 1 is that government agencies that own and use property do not tend to follow the policies set by the central asset management unit. Historically, this was the case in Canada and the

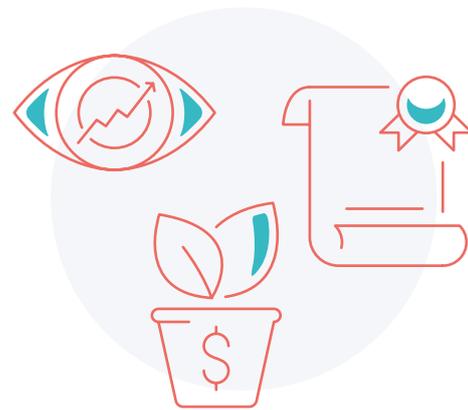


United States. However, two mechanisms that some governments have devised can help address this problem effectively: incentives and collaboration.

Incentives remain an underutilized tool in government asset management, but their power is illustrated in success stories (see Box 2). Incentives can be positive, such as those illustrated in Box 2, or negative, in the form of penalties for noncompliance. Note that all the cases in Box 2 relate to financial rewards, so it is important for the central asset management unit to have the power to set and fund such incentives.

Collaboration between the central asset management unit and future implementers during the development of new policies and regulations is critical. It provides feedback to policy and rule makers during the process, making the final product realistically implementable, as opposed to outdated top-down documents that tend to fail because they cannot be implemented in practice. The Property Branch of the Australian Government's Department of Finance, which acts as the central asset management unit, has been instrumental in introducing and utilizing such collaboration.

Finally, an important issue that continues to be explored within Model 1 is the level of centralization of asset management can be most effective and efficient. The



United Kingdom provides an interesting testing ground, as it has been undertaking the consolidation and centralization of government asset management within many agencies or ministries and, at the same time, the centralization of the entire government for asset management for general purpose properties. Apparently, two overlapping factors drove this reform: the pursuit of cost reduction and political agendas. The former Government Property Unit (GPU) became the Office of Government Property (OGP), which oversees a new Government Property Agency (GPA), an executive agency. Initiated by GPU and OGP, the agency promotes two flagship approaches:

1. A new real estate strategy, the centerpiece of which is to move the majority of civilian central government agency employees to 18–22 multi-agency government centers across the country, leading to further consolidation of government locations.



Photography by oscar garces / Shutterstock.com

2. Transfer ownership of all general purpose assets (office, warehouse, and storage) plus non-specialized scientific assets to GPA. GPA is tasked with strategic portfolio management and portfolio optimization, while agencies and ministries will become tenants of GPA-owned facilities.

However, according to the National Audit Office's assessment (NAO, 2017b), progress had been limited in both initiatives. Most importantly, the business case for centralizing asset management and ownership was still not convincing, including the suggested financial and operational arrangements.



Box 2.

Incentives for Better Asset Management: International Examples

-  **Canada.*** To rationalize federal property holdings and accelerate the identification and disposition of underutilized and surplus properties held by federal agencies, the Treasury Board of Canada Secretariat introduced the new policy, which provided incentives for disposition and, simultaneously, for improving AM practices. Owners obtained the right to retain 100 percent of the net proceeds from the sale of surplus property, if they met three conditions: (i) the agency has a strategic investment framework, including a long-term capital investment plan, approved by the Secretary of the Treasury Board; (ii) the proceeds from the sale are reinvested in the agency's other property, in accordance with the strategic framework; and (iii) the agency complies with reporting requirements related to the submission of data on the disposed property in the federal property database.

-  **Belgium.**** Furniture fees for government tenants in the Construction Agency are waived if tenants meet new space standards, such as smaller floor area per full-time employee, no walls between workstations and desk sharing.

-  **Province of Ontario, Canada.***** Any municipality seeking provincial funding for capital investment has to prepare a detailed municipality-wide asset management plan and show how its requested capital investment project fits within this plan. Municipalities were given several years to prepare the plan.

Sources:

* McKellar (2006). *Alternative delivery models: The Special Purpose Corporation in Canada*. In Kaganova and McKellar (Editors). *Government-owned asset management: international experiences*. - The Urban Institute Press, Washington DC.

** Meghan (The Building Agency, Belgium), personal communication 2015.

*** Ministry of Infrastructure. Municipal Asset Management Planning Regulation (O. Reg. 588/17).



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Model 2. Corporation. As shown in Figure 12, a government corporation leads asset management under the overall guidance of the government. The corporation may also manage specialized portfolios (e.g., surplus property), while private companies provide a range of specialized services. This model is used, to varying degrees, for managing general government assets in Austria, Estonia, Finland, and Latvia—all countries with small populations (i.e., not exceeding 9 million people).

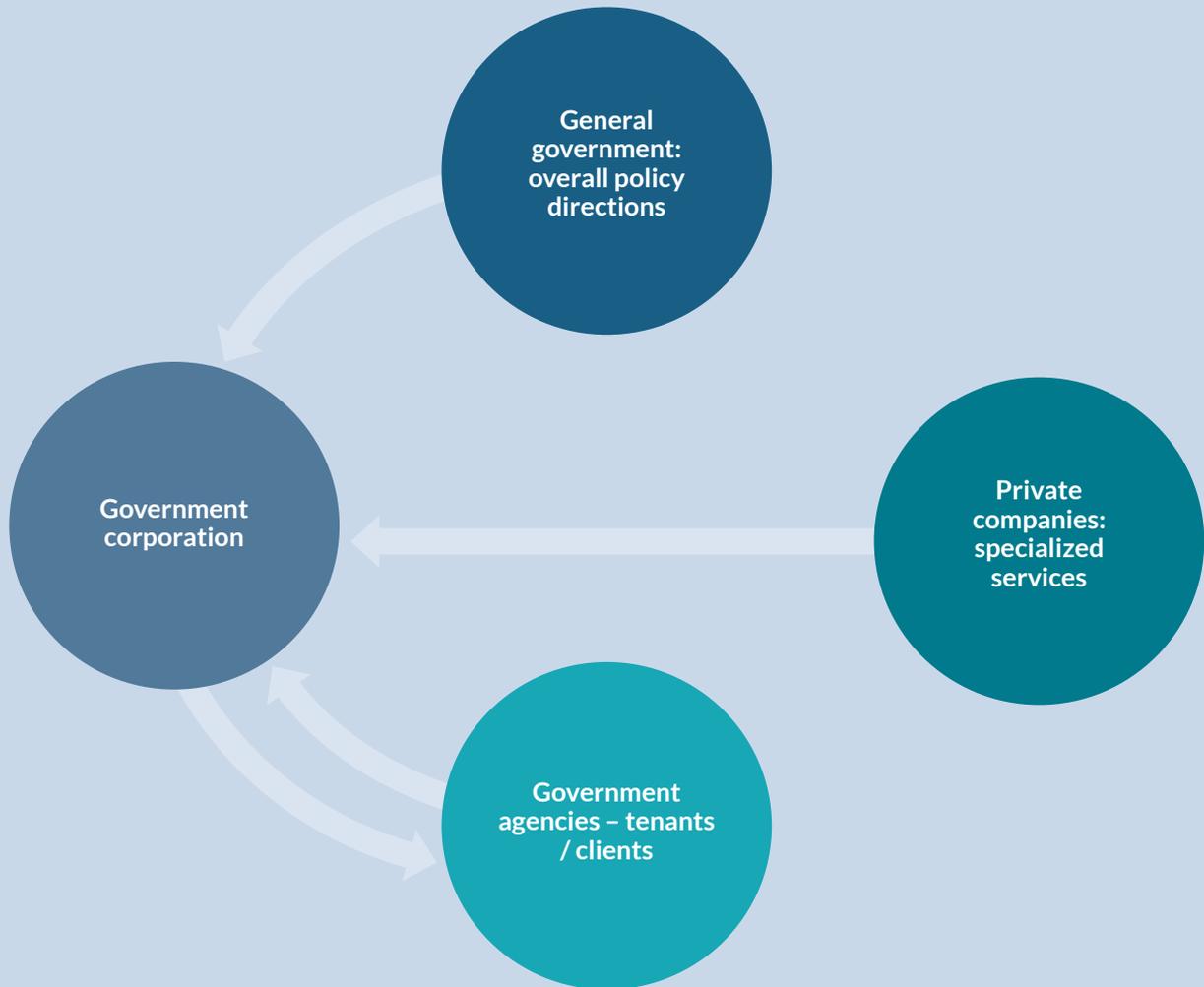
The main difference between the agency model and the corporation model is in the organizational nature of the central asset management entity: a government agency

versus a corporation. The use of corporations for asset management in general expanded in the 1990s, while specialized, service-oriented corporations (e.g., in transportation or other infrastructure) existed earlier. These corporations are usually created through special legislation. They are owned by the government but operate with varying degrees of independence (McKellar, 2006). In best practice cases, these corporations are required to follow commercial law for many critical elements of their performance, including accounting, reporting, and transparency. In practice, however, Model 2 is used with many important variations from case to case. For example, the corporation may have assets and liabilities



Figure 12. Model 2. Corporation

Source: Author's extraction from TWN & PuRENNet 2013 survey.



on its balance sheet or, alternatively, act as an exclusive service agent while the assets are held by some government agency (McKellar, 2006). In general, the corporation model can have many advantages over the agency model in terms of efficiency. For example, government corporations can be substantially more flexible than government agencies with respect to the number of staff, level of staff compensation, restructuring operations, outsourcing to the private sector, or others.

However, a legitimate question to ask is whether, to date, either model has been found to have a proven strategic advantage over the other. As mentioned above, there is a well-argued view (Detter and Foster, 2015) that the corporate model allows for greater efficiency, along with examples to support this view. However, this model is also associated with higher risks (e.g., asset stripping, high debts), unless it has very good governance.



The available evidence suggests that the best organizational model for a particular country or city may vary depending on the following factors:

1. The particular functions that should be performed (e.g., policy development should be left to government entities).
2. The type of portfolio under management (e.g., while a corporate model may work best for the disposal of surplus property, both models may work well for government-use properties, particularly if substantial portions of asset management are outsourced to the private sector as in the case of Australia).
3. Geographic scope (small vs. large countries).
4. Legal environments.
5. Regional experiences.

In practice, the corporate model is often used to manage specialized types of assets as its primary function, in Canada, Colombia, Mexico, Portugal, Russia, Spain, and other countries (World Bank, 2015).

To date, an open question is whether consolidating all portfolios (e.g., land, buildings and infrastructure) under a single management corporation is a productive idea. This could work well for small countries. For large countries, however, such an organization could create the risk of a too-big-to-fail situation. In summary, the search continues for better organizational environments for government asset management.



Records and Information

Lack of data or incomplete data is often the first obstacle to carrying out any reform. Asset management is no exception. Countries that have successfully implemented an asset management system have been required to keep a record of all information pertaining to assets owned by various government agencies, including real estate. This involves the adoption of best accounting practices and has facilitated transparency (Davis, 1999). The cadaster of public assets should include an estimate of their value. Frequently, a lot of information is dispersed among the various state institutions, and a large part of the effort is to compile it. Assigning value to assets is a complex task. In addition to the value of the original investment or the depreciated values, the replacement value of public assets is of interest for planning purposes. Thus, the lack of high-quality detailed information is not an impediment, estimation can be approached in a practical way using unit replacement cost averages (Conway, 2006).

The case of New Zealand, which is explored in more detail in Chapter 2, is a good example of how the implementation of a public sector accounting reform on an accrual basis (as part of a systemic financial management reform) was a key factor in improving the management of the State's assets and achieving the significant



Photography by KAMCO / Naraquium Sejong National Research Complex, developed by KAMCO

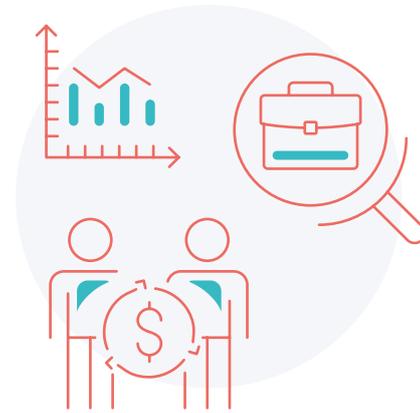
benefits they are intended to generate. As will be seen, this was so because with the reform the State was able to produce complete and reliable information on all the assets it owned, including the condition, valuation and location of the asset. This created the incentives that generated better asset management because asset management and asset risk management were important parts of the performance of the property, with information available to judge that performance. However, there should be no illusion: accrual accounting does not guarantee good asset management. More-

over, there are many examples of good asset management in countries and cities with “modified cash based” accounting.

Most Latin American countries have also undertaken similar reforms with the implementation of the International Public Sector Accounting Standards (IDB, 2017). While the process is long and complex, there has been significant progress. Specifically, in terms of accounting for major assets, the regional average of alignment with the accounting dimension is 33 percent. However, alignment with the most



relevant standard (IPSAS 17 - Property, Plant, and Equipment) is a promising 49 percent, which indicates that there has been progress in the recognition and measurement of property (IDB, 2017). This standard is particularly important as its objective is “to prescribe the accounting treatment for property, plant and equipment so that users of financial statements can discern information about an entity’s investment in its property, plant and equipment and changes in that investment. The principal issues in accounting for property, plant and equipment are (a) the recognition of the assets, (b) the determination of their carrying amounts, and (c) the depreciation charges and impairment losses to be recognized in relation to them” (International Public Sector Accounting Standards Board, 2020). However, accumulation of the depreciation charges in a special Capital Replacement Fund—which is an element of good asset management—is feasible and practiced by good asset management systems regardless of the accounting system. For example, the Tokyo Waterworks saves a part of water tariffs in such a fund, for paying for future replacement works (Suzuki et al., 2010). Again, this is not to suggest that an accrual accounting system must be in place for a nation to move forward in managing its assets more effectively. The goal is to have a sense of the condition, value, and repair/replacement costs of these assets, and there are other ways of estimating this information.



For efficient asset management it is essential, but not sufficient, to know what the assets are, to determine their value or how they will be managed for accounting purposes. A complete characterization of public properties is necessary. This means determining at least the location, condition of the property, history of use, utility, legal issues, possibility of lease or disposal, or whether there is unauthorized possession of the property. For example, in countries such as Singapore, they have even generated a central tree registry (www.trees.sg), with their corresponding codes, locations, and profiles (species, height, circumference, vigor), which has improved their maintenance, transparency, and accountability, as well as providing better park and garden services to citizens. These records are also important for securing or legalizing the ownership of the assets in the hands of the State with the corresponding property titles.



Financing Mechanism

A system that allows for the efficient management of public assets requires adequate sources of funding and spending capacity. There are three main expense categories associated with asset management: regular operations and maintenance, capital investment in renovation and replacement of existing nonfinancial assets, and capital investment in new nonfinancial assets. There are multiple traditional sources of funding these expenses, from general tax revenues to tariffs for infrastructure use to borrowing to intergovernmental transfers (the latter for local governments, which in the majority of countries receive substantial transfers, including for capital investment). However, these sources are often insufficient, and governments everywhere are searching for new sources of funding, particularly for capital investment or cost avoidance. A major category is land value capture (LVC) instruments, which include at least 16 instruments (Kaganova, 2020). Three government authorities enable these instruments: (i) the authority of the government as an owner of land and property (for example, to enter into public–private partnerships on government land), (ii) the authority to regulate land uses and land use parameters on both government-owned and private land (for example, to

sell additional development rights to developers), and (iii) the authority to set taxes, fees, and in-kind contributions (i.e. fiscal instruments).

To use LVC instruments to their fullest potential, governments need an enabling regulatory environment for these instruments. One recent practice in this area is the creation of public asset management funds. For example, Korea established the State Property Management Fund in 2011 to improve the utilization of state assets. In this way, the government eased the national financial burden by allocating revenues, such as those originating from the disposal and rental of general property to purchase government offices and official residences. At the same time, the government was able to reduce fiscal expenditure and actively respond to administrative demands by managing the supply of official residences and acquiring superior national land with funds from the sale of general property. When state property is sold, usually the higher-quality property is sold earlier and the lower-quality property is sold later, creating unnecessary costs for holding the latter. This is why they foresaw that, if higher-quality state assets were sold, eventually the problem of having to buy similar assets again at market prices would arise if an administrative demand for land to build government office buildings arose in the future. The fund helps to manage that risk.



Photography by KAMCO / Suwon District Attorney's Office developed by KAMCO

In this regard, Chapter 3 elaborates on the benefits of urban wealth funds at the subnational level. This mechanism frees asset management from short-term political influence, allowing cities to generate significant resources to finance much-needed infrastructure investments. A concept is to place all municipal assets—both used and surplus—under the control and management of a special city-owned corporation. In other words, “urban land funds” is a new term for a version of the corporate model presented above. Chapter 3 highlights the importance of managing these funds independent of short-term political influence, in a transparent and accountable manner, using standard private sector accounting and management practices. This management vehicle is described as a very convenient institutional arrangement

for governments, as it keeps public assets under government ownership while avoiding undue short-term political interference. The government appoints the auditors responsible for the portfolio and decides on the dividend target and the list of assets that could eventually be sold when sufficiently developed but has no influence on how the fund itself is managed. This strict separation is key to better asset management.

In this way, urban land funds facilitate and provide transparency in the implementation of the measures described above, such as the monetization of non-core assets to reinvest the resources obtained in new infrastructure. They also ensure the flow of resources needed to maintain and improve existing infrastructure.



Note that in the examples provided in Chapter 3, mandates of urban wealth funds (UWFs) are narrower than the chapter suggests for the “ideal case.” The examples presented are of a well-known model of a government-owned land development or redevelopment corporation dealing either with specific sectoral infrastructure (a metro system), which the corporation cross-funds by profits from developing valuable surplus land contributed by government or with redeveloping a particular city area. The version of the UWF that would consolidate all government assets (land, buildings, and infrastructure) under one corporate roof for the entire city has yet to be tested. Meanwhile, practitioners express reservations about it (Allegheny Institute, 2018).



nating it. This is usually approached in a comprehensive manner, including financial, fiscal, reputational, environmental, social, health, safety, and other risks. Not all risks can or should be eliminated, but with reasonably good information, much progress can be made in mitigating risks with significant consequences for users in terms of cost.

Good risk management can result in reduced liabilities such as insurance premiums, fines, and penalties. Risk response actions include emergency and business continuity plans. These incidents, when they materialize, should be investigated to identify what improvements need to be made to asset management to prevent recurrence and to mitigate their effects.¹⁴ However, proactive risk management is an element of an advanced and mature asset management system, and its introduction should be timed realistically.



Risk Management

The public asset management system must also make explicit and monitor the risk of the decisions made. A simple way to implement this analysis is to combine the probability of a deterioration in asset quality with the impact that certain types of failures would have.

This should be analyzed under a cost-benefit approach to optimize the level of acceptable risk vis-à-vis the cost of elimi-

14. ISO 55,000:2014.



Performance Contracts

Performance or service level contracts, when well designed, can be a very effective tool for monitoring the performance of contractors to whom some asset management functions are outsourced.

For example, in the case of highways, they typically consist of the management and maintenance of pavements, shoulders, drainage works, vertical and horizontal signage, right-of-way, bridges and user safety elements, subsequent to the initial recovery works and rehabilitation works, based on compliance with the KPIs established in the contract. This must, as a minimum, contain the following elements:

1. Verification and proof of the level of service;
2. KPIs for each element of the pathway;
3. The results control system;
4. Discounts for non-compliance with KPIs, the application of fines for non-compliance and the amounts penalized in the event of expiration of correction deadlines; and
5. Condition of the road network upon handover at the end of the contract/task.

Source: Guash, J.L. (2021). Road Network Maintenance and Rehabilitation: Issues, Concerns and Options



Measurement, Continuous Improvement, and Auditing

This involves having sets of indicators to measure results, introducing improvements based on these measurements, and assigning responsibilities to asset managers for the stewardship of assets to ensure that they are being put to proper use.¹⁵ The measurements refer not only to the performance of each individual asset, but also to the performance of the entire asset management system, to verify whether it is being efficient and effective in supporting the government in managing its assets. For example, a pioneering study in the region, developed by the Ecuadorian government with the support of the IDB, developed a system of indicators that allowed the level of maturity of institutional capacities for public asset management to be measured according to the dimensions of the ISO 55000:2014 standard.

The objectives of an asset management system are also defined in terms of service levels. Service levels are parameters or requirements for a particular activity or service area against which service performance can be measured. Such service levels can relate to dimensions of, for example, quality, quantity, reliability, responsiveness, environmental acceptability, and cost. It is not a trivial task to define service levels, but there is a large

literature on the benefits of doing so, and it is clearly a major input to inform timely decision making on infrastructure maintenance, rehabilitation, and replacement investments and expenditures (Conway, 2006).

The use of key performance indicators (KPIs) in asset management has grown significantly over the last 20 years. In principle, KPIs are used to compare performance with peer organizations, for decision making (e.g., how to achieve a mandatory target) and reporting. KPIs are also used within performance-based contracts to monitor the performance of contractors to whom some asset management functions are outsourced. However, KPIs in public asset management are mainly defined through ad hoc approaches, often without a clear initial justification for the indicators or a clear distinction between the performance of asset management systems and the performance of asset portfolios. Furthermore, most asset management organizations do not require the use of KPIs; they are used on a voluntary basis.

There is no common agreement on what the KPIs are for even the simplest asset category: office buildings. However, membership organizations of government asset managers, such as the Canadian National Executive Forum on Public Property (NEFPP) and the European Public Real Estate Network (PuRE-Net), are trying to reach a consensus among members on what core indicators should be used. Table 1 shows the latest thinking in these organizations.



Table 1. KPIs Recommended for Voluntary Use by Two Professional Asset Management Organizations

Source: Kaganova (2018) update, based on communication with both organizations.

Canadian National Executive Forum on Public Ownership, based on a survey of volunteer members, 2017	PuRE-Net, 2017: recommended common indicators
Operating and maintenance costs	Operating costs
Facility Condition Index (FCI)*	Vacancy rate
Space utilization (office) (m ² /FTE)	Space utilization (m ² /FTE)
Vacancy rate (office)	

* Facility Condition Index (FCI) = (Projected cost of addressing facility maintenance, repair and replacement deficiencies) / (Current replacement value of the facility).

Table 1 shows that these two organizations do not recommend using earnings or rate of return as common performance indicators, which is a positive development. The problem is that, in a quest to replicate private sector indicators, these have been misused in government asset management. For example, if a government asset manager earns revenue from the private sector, as in the case of the Canada Land Company, which sells federal surplus land to private developers, the use of profit as a KPI is fully justified. However, if a government asset manager receives income from other government entities (e.g., rent paid by tenant agencies for using government buildings, as in the case of the U.S. General Services Administration and many other government entities internationally), the use of profit or rate of return is mislead-

ing from the taxpayer’s point of view and should not be used. In such cases, when both the asset manager’s income and expenses come from public budgets, both actually come from taxpayers’ pockets, making the notion of profit moot.

At the current stage of practice and knowledge within public asset management, a reasonable and balanced set of KPIs might include the following:

Property / portfolio indicators:

- 1. Effectiveness of property use:** floor space per FTE; vacancy rate
- 2. Efficiency of property use:** annual operating and maintenance costs per square meter
- 3. Status of assets:** Condition of the property



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Asset management system indicators:

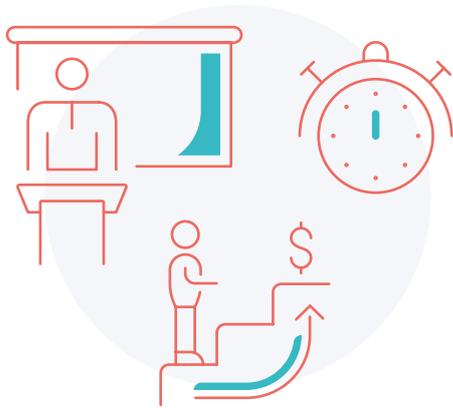
- 1. **Efficiency:** management costs (compared to private sector market levels)
- 2. **Quality:** customer satisfaction (tenants)
- 4. Contain management costs within market benchmarks;
- 5. Pay dividends from operations; and
- 6. Make capital repayments to the Australian government for any divestment of property.¹⁶

Another common approach to monitoring performance in government entities is a *balanced scorecard*, which monitors and reports on performance according to multiple criteria. For example, the Portfolio Operations Branch of the Australian Government’s Department of Finance uses the following performance requirements:

- 1. Achieve a commercial rate of return on the portfolio;
- 2. Maintain the condition of the portfolio in accordance with industry standards;
- 3. Meet the future needs of the lessee entities as agreed by the government;

Finally, it is worth reiterating the importance of an efficient auditing system that helps encourage asset management aimed at the achievement of intended results. For example, audit authorities in EU countries are developing specialized expertise among their staff to conduct asset-related audits at both the central and municipal government levels.

16. See <http://www.finance.gov.au/property/property/property-overview.html> 2 for more information.



Strategic Asset Management Plans

The main characteristic of strategic asset management plans is that they should take a long-term (at least 5–10 years) look at asset portfolios. They should be oriented toward implementing explicit policies and include the corresponding strategic orientations, activities, compliance schedules, monitoring indicators, cost estimates, assignment of personnel, and a specialized office to ensure compliance.

The strategic asset management plan must include two levels of consideration:

- 1. Life-cycle of each asset or system.** A central element of these plans is to recognize that assets must contribute to organizational objectives, and that they have value and a useful life (and therefore a depreciation rate) that can be estimated and optimized. The management of assets and the decisions made

in this policy and in the plans derived from it have an impact on the useful life of the assets, as well as on the quality of the service they provide, the costs involved in their operation, rehabilitation or replacement, and the economic or social benefits they can generate.

Finally, all of these policies, plans, and regulatory developments must be translated into a set of standard operating procedures (SOPs) that define the periodicity and specific procedures applicable to asset management. These are, by necessity, sectoral and by asset type. Any public policy approach to optimize maintenance expenditure, for example, should ensure that the resources allocated are used optimally. To this end, it is essential to have SOP manuals that are scrupulously applied, the results of which must be subject to review by internal audits. Such manuals exist for all types of assets at the international level, but they should be formalized and applied in a disciplined manner to produce the desired effects.

- 2. The portfolio level.** This part of the asset management plan needs to address issues above the level of a particular asset. For example, what are expected government-wide funding needs for replacing old assets and acquiring new ones due to territorial expansion? How should portfolios evolve over the next 10 years and how will this transformation take place?



Asset Life Cycle Management

Figure 13. Stages in the Life Cycle of Public Assets

Source: Authors' elaboration



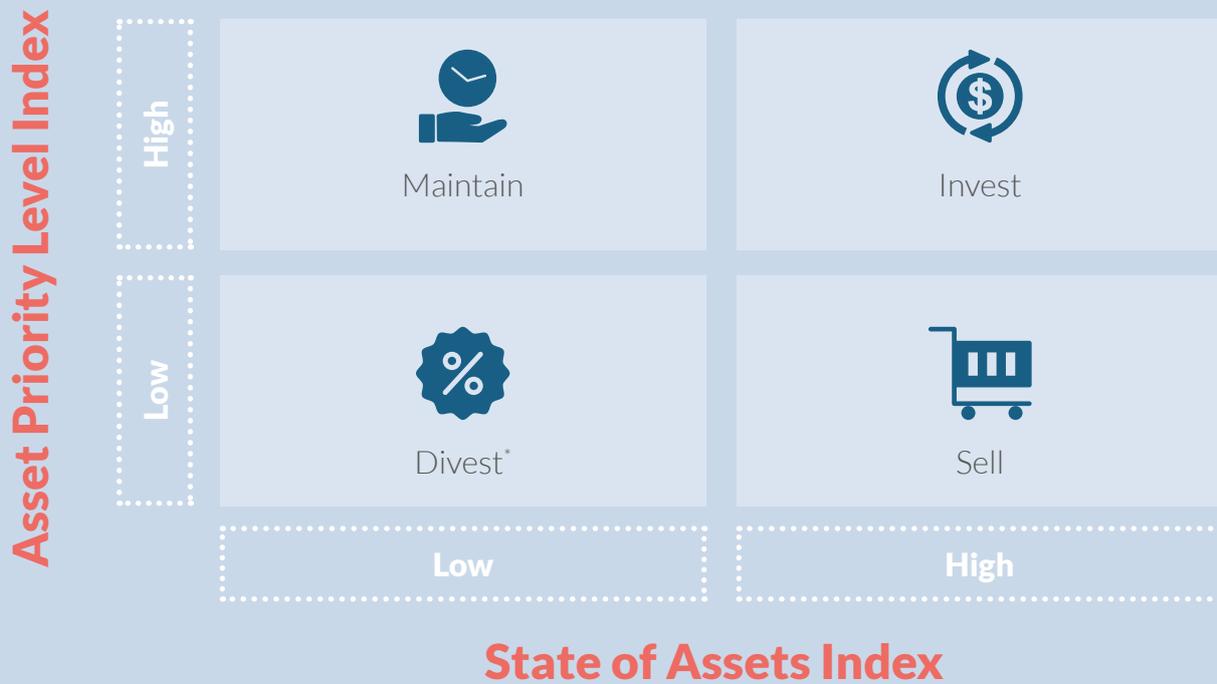
An asset management system, as described so far, provides a structured framework for the development, coordination, and control of actions taken on assets throughout their life cycle. Managing

assets under a life cycle approach as depicted in Figure 13 from their conception to their disposal allows for long-term decisions and maximization of the benefits that the assets are called upon to generate.



Figure 14. Example of Strategic Prioritization Matrix

Source: Based on interview with Kevin Radford, Assistant Deputy Minister of Real Property Services, Public Services and Procurement Canada, 2015.



* The divestiture may include a sale, exchange, closing, liquidation, spin-off, donation, etc.

The management of public assets must start with a thorough analysis of needs and inventory, followed by planning to ensure that the required assets are available with the quality and timeliness required by the needs of the service, or to dispose of them when necessary or convenient.

Government assets should be acquired or conserved with the sole purpose of maximizing economic returns, improving services to citizens, and respecting other government policies, in an environment of transparency with pre-established, uniform, and multifactorial criteria to assist in decision making. These criteria can combine several factors, such as the priority of

the asset and its condition (see example of strategic prioritization matrix in Figure 14).

Countries that have implemented efficient asset management models have consolidated their public investment and asset acquisition systems, linking them directly to support the fulfillment of government policies, as part of a supply function in the service of institutional objectives.

Once the asset is available, the policies, technical standards, plans, and processes that regulate its use and maintenance are activated. These should cover both the assets managed directly by the entity and those whose management has



been outsourced. While the responsibilities and complexities of control change, it is important that they remain part of the asset management system. There is a general consensus that operating and maintenance costs throughout the project life cycle should be explicitly and accurately identified and recorded.

Finally, it is important to incorporate evaluation as part of the life cycle of public assets, to generate evidence of their impact, introduce improvements to them or to the way they are being managed, and increase accountability for the public resources used. This is especially important in the case of large-scale assets.

Some Final Thoughts for Practitioners

Most practitioners at this point may recognize that having the perfect governance structure, or information systems, or accounting structures in place is rare. Many of these elements take many years to put into place. Nevertheless, national governments should still move forward in managing their assets more effectively, even under suboptimal conditions. What should prudent managers of government land and property do in such cases, given that improving asset management systems usually takes years? The following simple policies and rules can help governments strategically manage these assets (Peterson and Kaganova, 2010):

1. Inventory and map state land and property, starting with land and property that appear to be most valuable.
2. Introduce a policy emphasizing that the objective of selling or redeveloping of underutilized high commercial value assets is to obtain the highest and best value for the taxpayer. The question should not be, Is a specific property in use? but rather, What is the most productive use of the property? (Dong, 2017).
3. Introduce a policy that no transaction (including those between government agencies) can be conducted without prior market valuation of the property involved in the transaction.
4. Introduce a policy that requires, as a general rule, state property to be allocated (sold/leased) at market prices (with a closed list of exceptions). The policy should also establish procedures that ensure that property will be transacted at these prices. In particular, stipulate that allocation or disposal of government land to the private sector (including leasing) is conducted mainly through transparent competitive procedures: auctions in standard cases (where a winner is determined by the highest price offered) or requests for proposals in special cases (where a winner is determined by several criteria, of which the price offered is only one). The policy may stipulate that sometimes land can be placed on



over-the-counter, noncompetitive sale if no bidders are found at auction (e.g., sales of municipal industrial land in the City of Saskatoon, Canada).

5. Establish a clear list of cases when government land or property can be allocated at below-market prices. As a part of the policy, establish a rule that when such transactions are planned, the size of the indirect subsidy created through the below-market price must be estimated before a decision is made on going forward with such a transaction.
6. Establish a systematic process for planning and conducting a valuation of the most valuable and/or underused properties (regardless of whether there is an intention to dispose of these properties) and properly fund such valuation.
7. Use qualified professional appraisers to perform this work. They are typically members of a national professional association and act in accordance with international standards of practice and international valuation standards (such as those promoted by the International Valuation Standards Council, or similar standards accepted by a national association of appraisers).
8. Require that net revenues from land and property disposition are reinvested primarily in public capital construction. Provide incentives for government agencies to do so (see the case of Canada in Box 2).



Note that the ideas outlined above are used, in one form or another, in countries with advanced asset management. For example, in Canada, federal property must be transacted at market values, even if between two government entities. In the United States, the GSA uses auctions (including online auctions) for disposal of surplus property.

Where to Start?

Improving or developing asset management systems is always an ongoing process as opposed to a one-time effort. Experiences of central governments in countries that have been working to establish and improve asset management systems for years (e.g., Australia, Canada), along with some sub-national success cases, suggest the following as possible first steps:

1. Secure a high-level leadership commitment to improving asset management.



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2. Establish a temporary working group (WG) tasked with developing an asset management modernization plan. All main asset-holding agencies should participate in the WG. A WG's implicit goal is to give these stakeholders a chance to discuss possible solutions and agree on a course of action, especially on organizational changes that otherwise could provoke resistance. Asset management experts should facilitate the work of the WG.
3. Commission a high-quality professional assessment of asset management (to include policies, laws and regulations, organizational settings, systems, and –to the extent feasible– portfolios). It should include recommendations on modernization and improvements. The

assessment should provide convincing estimates of the benefits of implementing asset management modernization.

4. The WG should develop an action plan for beginning implementation based on the assessment's recommendations and obtain high-level support for this process.

In practice, modernization will be more successful if championed and spearheaded by a high-level agency such as the ministry of finance or its equivalent. It is not recommended to start with organizational changes; rather, these should be a part of a strategic approach to asset management modernization. More importantly, organizational changes will be more successful if they are first discussed and agreed upon within the WG.



Conclusion

Toward Better Asset Management in Latin America and the Caribbean

The Latin American and Caribbean region has vast, unexploited wealth in the form of uncounted or underutilized public assets. In countries where this function has been optimized, the gains have been enormous. The international literature agrees that a well-run asset management program provides transparent and accountable property management with the best value for money and unnecessary cost savings. It is a complex task, but one that cannot be put off. The region has some good examples of effective asset management.

A strategic public asset management improvement program underpins the State's ability to realize significant benefits in many areas. These include significant tax revenues that can be used for new capital investment; social benefits from more productive uses of public assets; reduced risk to users of public services from catastrophic infrastructure failures; higher and sustainable levels of service to the public at lower cost; increased transparency and accountability; generation of public savings in the medium and long term from reduced total life-cycle costs of assets (from identification of public assets); reduced public savings in the medium and long term from reduced total life-cycle costs of assets; higher and more sustainable levels of service to the public at lower cost; greater transparency and accountability; generation of public savings in the medium and long term by reducing the total life-cycle costs of assets (from identification of infrastructure needs to investment management, maintenance, disposal, and final evaluation); and improved decision making on resource allocation. It is therefore critical for the countries of the region to produce and disseminate information and technical inputs that help improve the management of public assets, contributing to a better social and economic use of resources.



Appendix 1

Typology of Public Assets by Use and Corresponding Focus of Attention

Source: Adapted from Peña (2016).

Type of Asset	What Does It Contain?	Emphasis Possible, Some Examples
Central government administration	Office buildings, equipment, furniture, vehicles, etc.	Development of maintenance management capabilities.
		Centralized management of maintenance criteria, budget, and execution.
		Standards for use (e.g., combining shared citizen service centers with offices and commercial activities or other mixed uses).
		Ensure ownership, efficient use, user satisfaction.
		Energy efficiency standards, indoor environmental quality, resource savings, etc.
		Disposal of non-essential/non-necessary assets based on multifactor analysis.
Public specialized care services	Education, health, child care, police stations, etc.	Improved transparency, auditing, and accountability.
		Determination of quality criteria for customer service.
		Implementation of mechanisms to systematically measure the satisfaction of service users for continuous improvement.
		Development of the service levels required in each area of specialization.
		Development of private participation in the management of infrastructure and equipment based on required service levels, and long-term contracts with criteria of inclusion and equity, strengthening community participation.



Type of Asset	What Does It Contain?	Emphasis Possible, Some Examples
Defense assets	Equipment, armaments, ammunition, missile and torpedo maintenance centers, military buildings and personnel housing, goods not related to the object of defense.	Survey, systematization, and automation of information management.
		Coordination mechanisms to ensure adequate strategic direction, evaluation, safety, and control in the management and maintenance of assets.
		Financing mechanisms and efficiency in the use of resources to guarantee maintenance.
		Transfer of non-defense assets.
Heritage and tourism assets	Historic districts, churches, museums, monuments, archaeological sites, beaches, forests, parks, nature reserves, etc.	Generation of spaces for private and community participation in the enhancement of the assets, ensuring their preservation through the commercial use of the spaces while respecting the character of the assets.
Assets associated with the productivity of the economy	Electricity generation, transmission and distribution; exploration, extraction, transportation, storage, and distribution of hydrocarbons; telecommunications; road network; ports; airports.	Asset management that responds to specialization criteria, with management by public companies or responsible entities.
		Complex infrastructures as single assets; the composition and internal management of such assets will be the responsibility of the companies/entities.
		Evaluation and monitoring of asset performance through indicators of operating levels and production levels.
Assets for non-administrative use	Commercial premises, vacant land, agricultural land, etc.	Disposal of non-core assets based on multifactor analysis.



A New Zealand Case Study*

Ian Ball, Ph.D.

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* Background material for the IDB seminar “Gestión de Activos Públicos: Buenas Prácticas Internacionales.”
Buenos Aires, August 1-2, 2018



Introduction

This chapter outlines the background to, and broad nature of, the accounting and financial management reforms undertaken by the New Zealand government nearly three decades ago, which provide the context for asset management practices in the New Zealand government and the country's local authorities. It describes some of the

key features of asset management for the government as a whole, state-owned enterprises (SOEs), government departments, the New Zealand Super Fund (a sovereign wealth fund), and local authorities. Finally, it addresses a number of challenges that the reforms have had to address and reaches some conclusions.





The New Zealand Context

To put the following discussion into context, New Zealand's gross domestic product (GDP) in 2017 was \$NZ268 billion, equivalent to US\$186.4 billion (2017, PPP). The government's financial statements show that the total assets owned by the government as of the end of May 2018 were \$NZ324 billion, of which \$149 billion were physical assets (land and buildings, infrastructure assets such as roads and bridges, schools, hospitals, motor vehicles, military equipment etc.), and financial assets (including share investments, marketable securities, mortgages, long-term deposits, student loans, tax and other receivables, cash and cash equivalents) amount to \$NZ153 billion. These assets are held and/or managed by a number of different organizations, including the Treasury, the New Zealand Super Fund, the Reserve Bank, and other government departments and independent Crown entities (statutory authorities).



These assets are held and/or managed by a number of different organizations, including the Treasury, the New Zealand Super Fund, the Reserve Bank, and other government departments and independent Crown entities (statutory authorities).



Financial Management Reforms as an Element of Wider Reforms

The financial management reforms in New Zealand were a significant part of a wider set of public management reforms, which were in turn part of a wider set of fundamental macroeconomic reforms. These reforms, which commenced in 1984, were an attempt to address deep-seated economic problems. The New Zealand economy was highly regulated. The government had run uninterrupted deficits for 20 years, with a low rate of economic growth and increasing unemployment. The reforms were aimed at achieving better performance from all parts of the economy, including the public sector.

Prior to the financial management reforms, the country's financial management system had a number of characteristics which were seen to inhibit its performance. These included the following:

1. Cash-based budgeting and accounting
2. A centralized, Treasury-run accounting system
3. Input focus with detailed rules
4. Little decision-making authority granted to managers
5. Program budgeting
6. Fund accounting

The public financial management system that was designed effectively changed all these characteristics. The new system was based on accrual numbers, was decentralized with departments operating their own financial information systems, focused on outputs and outcomes, granted to departmental managers significant decision-making authority over the consumption of inputs, and budgeted on the basis of outputs, not programs.



“Performance” Defined for Government Departments



and quantity of the services, the quality of those services, delivery location, timeliness of delivery, and full cost of the services. The latter would involve aspects such as the maintenance of the organization’s capital, whether physical, financial or human, the strategy of the organization, its risk management processes, and so on. Importantly, the owner would be keenly interested in the asset management policies and practices of the organization.

One novel element of the conceptual framework underpinning the financial management reforms was the manner in which “performance” was defined. While there were three components of this definition, the one with particular relevance to asset management was the distinction made between performance as it would be assessed by the recipient of an organization’s services, and performance as it would be viewed by the owner of the organization. The former would involve aspects such as the nature

Critically, the new system required that the performance of a department (or a Crown entity), and of its chief executive, should be assessed in terms of both dimensions of performance—ownership performance and service performance. To measure performance on either dimension, it was essential that the organization had in place a financial system based on accrual accounting. This was necessary to



Photography by 89stocker / Shutterstock.com

measure the full cost of services produced (including depreciation, cost of capital etc.) as well as, from the owner's perspective, whether the organization's capital had been maintained. One of the consequences of having the financial management system based on accrual information was that the organization produced complete and reliable information on all the assets it

owned, including such information as the asset's condition, valuation, and location. This created the incentives and accountabilities that generated improved asset management, because asset management, and management of asset-related risks, were important parts of ownership performance, and there was information available to judge that performance.



Requirements for Good Asset Management

The use of accrual-based accounting information systems meant that the government and its sub-entities had vastly improved information on the government's asset holdings. For high-quality asset management, this is necessary but not sufficient. In addition, it is necessary to have well-designed institutional arrangements and appropriate incentives.

The institutional arrangements relate to organizational design, including role assignment, allocation of decision rights and independence in the discharge of those rights, as well as legislative support. These arrangements were established in

the *State-Owned Enterprise Act 1986*, the *State Sector Act 1988*, and the *Public Finance Act 1989*, as well as later legislation addressing Crown entities and the New Zealand Super Fund.

Appropriate incentives were created in part through the arrangements above. For example, in the case of SOEs, the legislation requires that they operate as successful businesses. For government departments, one incentive for sound asset management was the establishment of a capital charge. Departments were charged for the amount of capital they employed at a rate that reflected current market rates.



The Government as a Whole

From a whole-of-government perspective, a key element of good asset management lies in the assignment of responsibilities. SOEs are given responsibility for managing the assets under their control and achieving the rate of return on those assets required by the shareholding ministers. Assets needed to deliver the services of a government department are assigned to that department, are on its balance sheet, and are subject to a capital charge, equivalent in principle to the rate of return expected of SOEs. Financial assets are assigned to organizations, such as the New Zealand Super Fund, which is expected to generate “maximum returns without undue risk.”

Other elements of managing the government’s assets include legislative requirements to publish monthly financial statements, which show how the value of assets,

liabilities and net worth are tracking relative to budget; publish annually a full set of financial statements which are prepared according to independently determined accounting standards (International Public Sector Accounting Standards) and subject to independent audit; and publish at least every four years an investment statement describing the government’s policy toward the long-term management of its assets.

In addition, the government manages its assets through the use of fiscal risk analysis, stress-testing of the government’s balance sheet, and investor confidence ratings. The latter are an evaluation by the Treasury of the quality of management of key asset-owning departments, with associated incentives in the form of greater delegations of authority to organizations that score higher in the ratings.

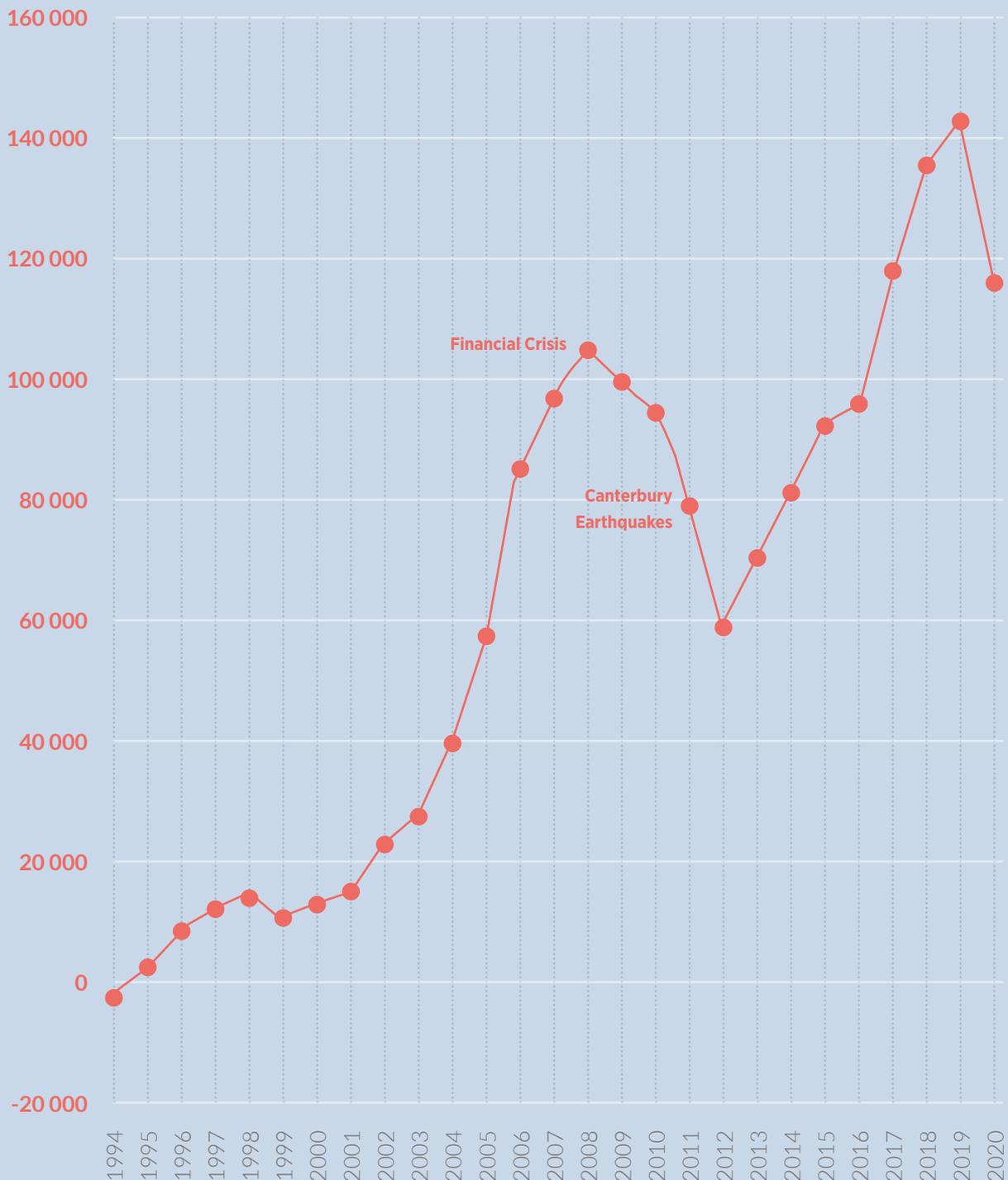


Overall, the quality of the government’s balance sheet management is captured in Figure 15. It shows the track of net worth in the period since the major reforms were introduced, a track that reflects annual surpluses

and increases in net worth in virtually every year other than the four years following the global financial crisis and the two major earthquakes that devastated Christchurch, New Zealand’s second city.

Figure 15. Net Worth of the New Zealand Government (\$NZ millions)

Source: New Zealand Treasury, Fiscal Time Series Historical Indicators 1972-2020.





State-Owned Enterprise

Three key elements of the arrangements designed to ensure good asset management in SOEs are: the process for the appointment of independent directors who are selected on the basis of skills and experience; the legislative require-

ment for every SOE to have as its principal objective to be a successful business (see legislative extract below), and the process of formal expectations setting by the ministers responsible as owners of the specific SOE.

Part 1 Principles



Principal objective to be successful business

The principal objective of every State enterprise shall be to operate as a successful business and, to this end, to be:

1. As profitable and efficient as comparable businesses that are not owned by the Crown; and
 2. A good employer; and
 3. An organization that exhibits a sense of social responsibility by having regard to the interests of the community in which it operates and by endeavouring to accommodate or encourage these when able to do so.
-



Government Departments



asset management may feature as part of the performance expectations of a chief executive or senior manager, especially in asset-intensive departments. The fact that departments must incur depreciation expenses associated with their assets focuses some attention on the assets. Departments with large asset holdings are subject to the Investor Confidence Rating process, a key component of which is the quality of asset management planning. Departments can sell assets and use the proceeds to buy other assets, enabling a department to change the structure of its asset holdings to reflect, for example, changes in technology. And as mentioned above, there is a capital charge levied on the department which is calculated by applying the charge rate to the net worth of the department (its assets less its liabilities). If the department can reduce its asset base, for example by using its assets

Government departments in New Zealand have on their balance sheets, and are responsible for managing, the assets they use in the production of their services. These may be land and buildings, plant and machinery, motor vehicles, office equipment, and so on. There are a number of mechanisms that can create incentives for good management. These vary according to the role of the department, the size of its asset base, and the role of the individual manager. High-quality



more efficiently, it can keep the associated reduction in the capital charge and apply this to other inputs it wishes to acquire.

The extract below summarizes the benefits of the capital charge.



The Capital Charge

- ✓ Helps ensure that prices for goods and services produced by government agencies reflect full production costs.

- ✓ Allows comparison of the costs of output production with those of other producers (Whether in the public or private sector).

- ✓ Makes explicit the cost to the Crown of maintaining its capital investment and creates an incentive for agencies to make proper use of working capital and to dispose of surplus fixed assets.

- ✓ Helps (as part of a full cost model) maintain a 'level playing field' between public and private sector bids for competitive tenders.



The New Zealand Super Fund

The New Zealand Super Fund manages approximately \$NZ40 billion in financial assets. It was established to build a fund that would lessen the impact of New Zealand’s aging population, and the associated increase in pension payments, on the government’s balance sheet. Key among the institutional arrangements to ensure that the assets managed by the New Zealand Super Fund are managed in the long-term public interest are: the governance arrangements for the appointment of the Guardians and the management of the fund’s assets and the legislatively prescribed objectives of the fund.



The governance arrangements can be described as “double arms-length.” That is, the selection of candidates for the board (the Guardians) is undertaken by an independent nominating committee, and the investment decisions taken by the Guardians and management is independent of the government.



Photography by Naruedom Yaempongsa / Shutterstock.com

The objectives of the fund are specified in legislation as follows:



The guardians must invest the Fund on a prudent, commercial basis and, in doing so, must manage and administer the Fund in a manner consistent with :

1. Best-practice portfolio management; and
2. Maximizing return without undue risk to the Fund as a whole; and
3. Avoiding prejudice to New Zealand’s reputation as a responsible member of the world community.

The Fund has achieved high levels of investment performance, as seen in its “being recognized by JP Morgan in 2015 as the best-performing sovereign wealth fund in

the world, following a global study on fund performance over a five-year period” (NZ Super Fund, undated).



Local Authorities

Local authorities in New Zealand operate independently of the central government, with their own sources of revenue and with the ability to borrow. They nevertheless must comply with a range of legislative requirements designed to ensure responsible fiscal management and good asset management. Included among these are requirements to have a balanced budget each year, to produce a long-term

plan with associated forecast financial statements for at least 10 years, and an infrastructure strategy covering each of the next 30 years. There are also a range of governance requirements associated with the development of these plans and strategies, designed to ensure high levels of community engagement in the planning processes and transparency in the operations of councils.





Challenges: Those Overcome and Those Remaining

A recent World Bank study, entitled Regional Study on the Management, Control, and Recording of Fixed Assets, identified a number of challenges to the implementation of asset management reforms. These were related to:

1. Legal and regulatory frameworks.
2. Overlap of responsibilities, poor communication and coordination.
3. Lack of computerized and integrated financial management systems.
4. Unreliable and outdated financial information.
5. Poor verification, reconciliation, and valuation of fixed asset categories.
6. Weak internal control and external oversight of fixed asset management.
7. Implementation strategies and change management process.

In implementing the broader financial management reforms in New Zealand, all of these challenges existed in the pre-existing systems to some degree except the last one. The implementation strategy was well developed and successful, and the reforms were completed at a departmental level within two years and fully completed at the whole-of-government level within five years. Many of these challenges exist almost by definition. If a government is



Photography by Rudy Balasko / Shutterstock.com

operating on a cash basis, it is extremely unlikely, for example, to have asset records that meet the requirements of an accrual-based system, whether those assets are property plant and equipment or tax receivables.

Yet challenges will always remain, and the system in New Zealand can still be regarded as a work in progress. Some elements are deeply embedded, and it is almost impossible to conceive of them being changed. These include the use of accrual-based information for budgeting, appropriations, and reporting. Others have been subject to change, and indeed some aspects are currently under review. However, at the present time it seems highly unlikely that



the features of the system designed to encourage high-quality asset management will be weakened. Rather, some of the disciplines that apply to financial and physical assets may be applied to other types of capital, such as intellectual property and human and environmental capital.

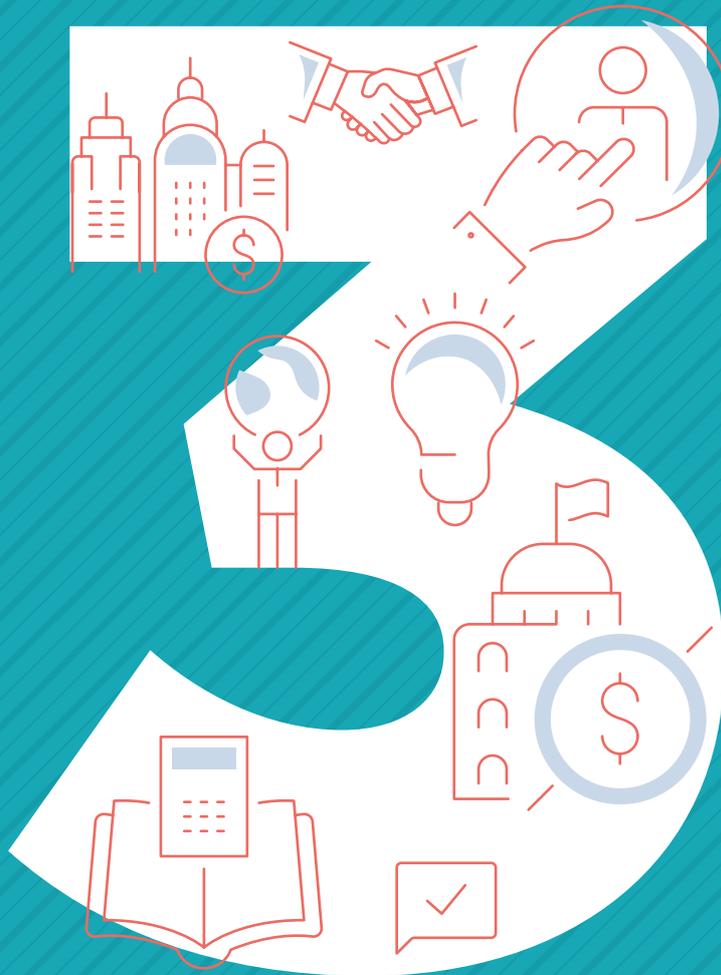


Conclusion

Governments hold huge asset portfolios, and in the vast majority of governments they are not well managed. The opportunity cost of this mismanagement is similarly vast. The prerequisite to exploiting the possible returns from these assets is to have reliable information on what the assets are and what they are worth. This information, and the benefits that can flow from it, are part of the benefit governments achieve when they implement accrual-based accounting systems. Put simply, it is not possible to manage a balance sheet, and the assets on that balance sheet, without first having a balance sheet. A financial information system that operates on accrual-based information produces that balance sheet.

The New Zealand case study, which now has a history of almost 30 years, demonstrates that high-quality public financial management, including high-quality asset management and high-quality public sector accounting, are both possible and hugely beneficial to the economy and the society within which they operate.





How to Turn around City Fortunes by Unlocking Public Assets

Dag Detter

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Post-COVID Recovery

Governments need cash to survive the fallout from COVID-19. By tapping hidden value in their balance sheets, they can exit the crisis faster and more sustainably. But success depends on strong political will.

Governments need cash to survive the fallout from COVID-19. By tapping hidden value in their balance sheets, they can exit the crisis faster and more sustainably. But success depends on strong political will. Governments everywhere and at every level own a vast array of commercial assets.

If professionally managed, these hidden assets could potentially generate additional revenues, boosting government budgets and strengthening balance sheets. But first we need to find this hidden goldmine. We need an asset map.

According to the IMF, the value of public assets globally is twice that of global stock markets, twice global GDP, and much larger than public debt (IMF, 2018b). However, unlike listed equity assets, this public wealth is often unaudited, unsupervised, and unregulated. Even worse, in most countries it is almost entirely unaccounted for. Consequently, when formulating their budgets, most governments largely ignore the assets they own and fail to recognize that they could generate substantial yields that open up much-needed fiscal space.



Governments could use this headroom to kick-start growth or to buffer themselves from future shocks, without resorting to debt, exhausting existing savings, or being forced to revert to excessively painful austerity measures. However, incentives to encourage policymakers to consider the full spectrum of public commercial assets as described in Figure 16—such that the whole public sector balance sheet can be marshalled to achieving economic recovery—are often missing.

Basic tools such as accrual accounting, which are fundamental building blocks to bring about greater transparency and disclosure (of benefits as well as costs), can enable governments to pursue optimal decisions with respect to the management of public assets, benefiting society (IMF, 2014a). Yet these tools are often overlooked as they take years to implement and

from a superficial perspective are often seen as costly. In the meantime, governments can do a swift feasibility study to size up the portfolio – an ‘Asset Map’. This Asset Map would not only confirm the hypothesis of the size of the portfolio of assets, but also the potential yield that could be generated, if professionally managed. It can be done within weeks or perhaps months, depending on the quality of data. It is also so affordable to the point it would risk more criticism not pursuing such a simple exercise.

Properly accounted for and professionally managed, public assets could potentially generate additional revenues worth 3 per cent of GDP, boosting government budgets (IMF, 2019). Managing these assets better could help offset the growing debt problem facing many governments and support future economic growth, while the additional yields could help fund public goods such as public housing, health care and infrastructure, or even climate transition and help mitigate the impacts of climate change.

Furthermore, economies with stronger net worth (assets less liabilities) experience shallower recessions and recover faster in the aftermath of economic downturns (IMF, 2019). Stronger net worth will also impact the cost of government borrowing (IMF, 2021).



Figure 16. Public Commercial Assets

Source: The Public Wealth of Nations, 2015.



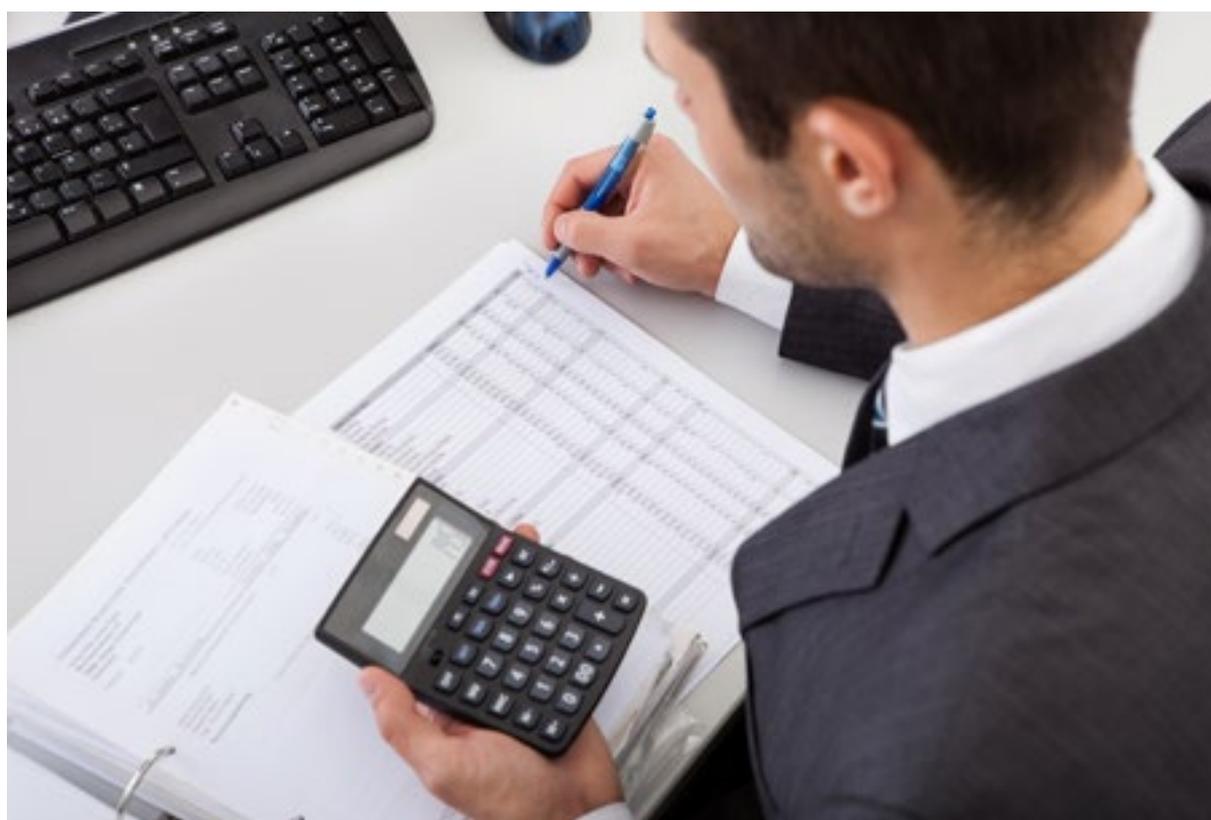
Professionally managed, could generate an income



Professionally Managing Cities' Public Assets

A crucial first step is achieving a proper understanding of the city's balance sheet and then not the least its assets. With an understanding of the proper value of assets in hand, taxpayers, politicians, and investors can better grasp the long-term consequences of political decisions and make choices that increase returns rather

than increasing taxes, debt, or austerity. Efficient management of city assets through our proposed institutional structure —urban wealth funds— designed to break free from short-term political influence will enable cities to ramp up important resources to fund much-needed infrastructure investments.





Boston's Public Wealth

Cities generally do not assess the market value of their economic assets. However, even a rough calculation can help illustrate the great economic importance held by public assets.

Consider a city like Boston, which at first glance does not appear to be particularly wealthy, or actually may be seen as bankrupt if perceived as a private corporation. The city reported a total asset value worth US\$3.8 billion in 2014 and liabilities of US\$4.6 billion, indicating a negative net worth (assets less liabilities). However, this still largely underestimates the true value of the asset side of the balance sheet, not the least the real estate, reported at a book value of US\$1.4 billion. Like most U.S. cities, Boston reports its assets at book value, valued at historic costs. If reported using the International Financial Reporting Standards (IFRS), which allows the use of market value for assets, the portfolio of assets'

worth would be significantly higher than what is currently reported. In other words, the city is operating without fully understanding or leveraging its hidden wealth.

A value estimate of the real property portfolio in the city of Boston made from a consolidated list of publicly held real estate alone and estimate a defensible value has given an indicative valuation of the real estate alone to be around US\$55 billion. The Boston city administration and political leadership do not know the value of this ratio and are therefore not able to fully measure the magnitude of the opportunity cost by leaving these assets undermanaged. If they had the proper visibility, they would get a sense of the urgency to develop these assets shrewdly.

Accounting for the market value is the first step toward quality asset management. The next step is to understand the yield or return that the city earns from revenue and rising market values on its assets. This is key to be able to compare it with other alternative investments, but also to understand whether the performance has



been satisfactory and show stakeholders that their wealth is responsibly preserved.

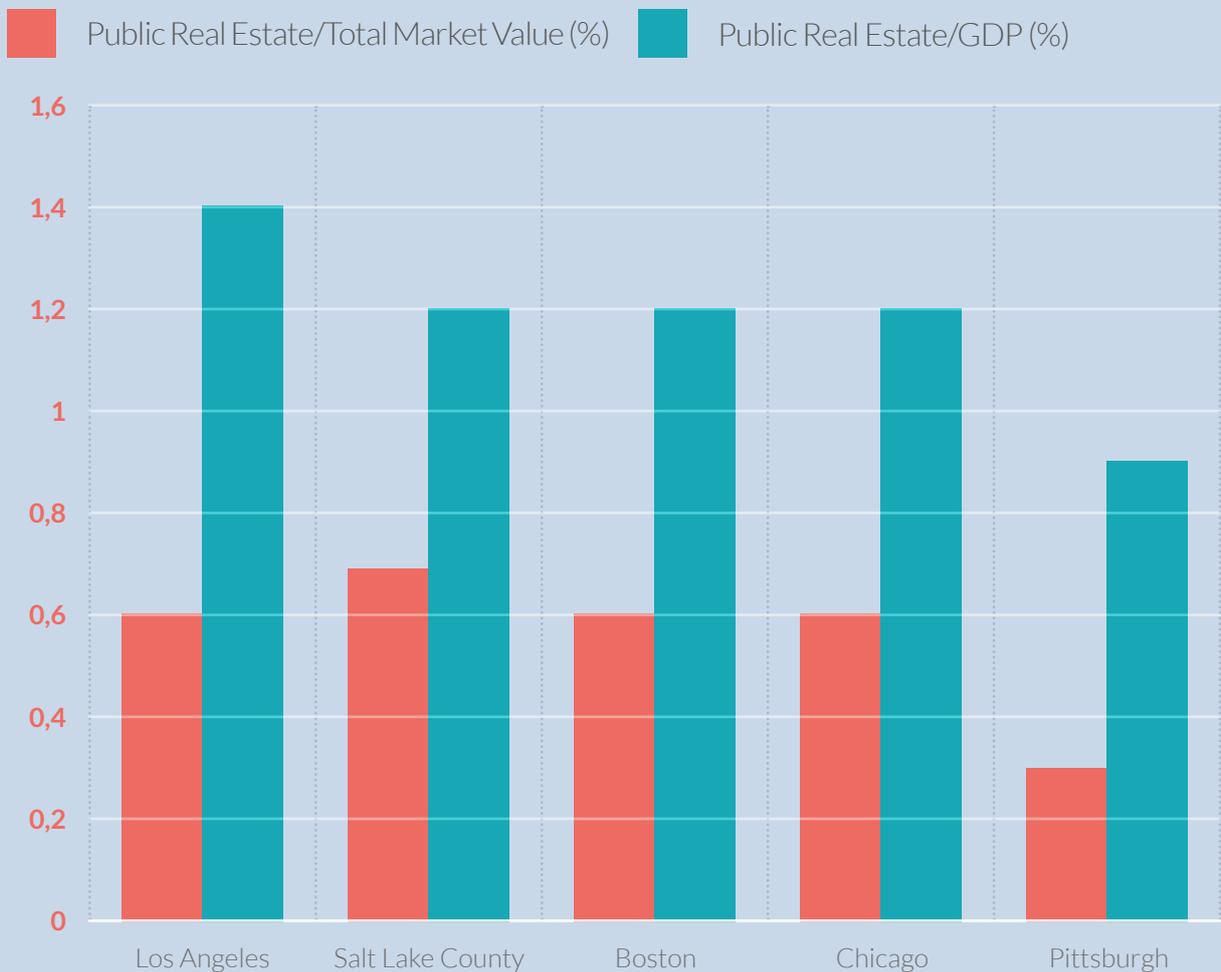
By design or by default, Boston does not report any return on its assets. Assuming, again very cautiously, that the city could earn a 3 percent yield on its commercial assets with more professional and politically independent management of its assets, a modest yield of 3 percent on a portfolio worth US\$55 billion would amount to an income of almost \$1.7 billion a year. That is almost four times more than Boston's current capital plan of about \$400 million. In other

words, even with a modest yield, Boston could quadruple its infrastructure investments.

Boston is by no means exceptional. It represents a common scenario across U.S. cities, and in fact internationally, of public wealth trapped in real estate and other commercial assets that is not optimized. As a rule of thumb, cities own real estate assets alone (not including operational assets) worth more than the GDP of their jurisdiction and representing more than half the value of the total real estate market as depicted in Figure 17.

Figure 17. Hidden Public Riches

Source: Urban 3 and Detter & Co. <http://www.urban-three.com/>. <http://detterco.com/>





Toward Professional Asset Management in Cities

Commercial assets owned by governments are a virtual (and in some cases, literal) goldmine and they extend far beyond the obvious, visible assets like official buildings, the local airport or railway station, or utilities. Underneath this tip of the iceberg is an ecosystem of less visible assets. Many pieces of this vast portfolio —such as buildings

for large telephone exchanges and post offices, or just vast spaces for administrative paperwork— predate the arrival of technology that made their purposes obsolete.

There are three steps towards more professional management of public commercial assets:



Asset Map: Compile a list of assets and conduct an indicative valuation of the portfolio of assets that will allow the production of an informal review of the portfolio and the attraction of public support for professionalizing the management of the portfolio.



Set up the Urban Wealth Fund: Incorporate the fund, transfer all assets, and appoint a professional board and auditors, so that the government can fully delegate the responsibility and accountability of the management of the portfolio.



Actively manage assets: Produce a comprehensive business plan for the portfolio as a whole and for each underlying segment, such as real estate and operational assets, to understand how to put each asset to its most productive use, revealing the opportunity cost of using the asset in a sub-optimal way.



Photography by TMLsPhotoG / Shutterstock.com

Cities that have successfully mapped their real estate will find thousands of assets made visible, far beyond the well-known public building. All these assets can be optimized and generate greater value through a more professional management; even stranded assets may be revived with the right approach in place. A return on capital can be achieved through commercialization and optimization, and ultimately through rationalization.

Commercialization requires that a comprehensive business plan assess all assets, including those that are unused, used by third parties, or directly used in the provision of public services, but that can either be (i) relocated to more cost-effective/beneficial locations, or (ii) used to generate ancillary income (e.g., through additional/alternative use of real property and exploitation of publicly owned intellectual property).

Optimization requires economies of scale to be achieved across the entire portfolio and should be as much of a priority as maximization of yield from each individual asset.

Rationalization involves determining mature assets, which are those that have reached a fair value and where the proceeds from a sale can be reinvested in assets that are capable of yielding a higher return. Mature assets could be disposed of at the relevant point in the market's cycle, as part of the broader business plan for maximization of yield across the entire portfolio. Monies generated from rationalization activities should be first made available as a source of funding for achievement of the business plan and ultimately to fund infrastructure investments.



Unlocking Value: International Examples



Mass Transit Railway (MTR) in Hong Kong

The MTR has paid for a railway system the size of New York City without using one tax dollar. It manages this vast infrastructure investments and is also a major property developer that helped to significantly increase the delivery of new residential homes in Hong Kong. Many of its stations are incorporated into large housing estates or shopping complexes. Residential and commercial projects have been built above existing stations and along new line extensions. So far it has successfully developed the property over about half of the system's 87 stations, amounting to 13 million square meters of floor area. New projects being planned or developed will add another 3.5 million square meters.



Real estate development by MTR in Hong Kong / Photography by Daniel Fung / Shutterstock.com

On top of that, MTR pays a substantial dividend to the city, providing an income for the government that has been deployed to pay off existing debt and develop other assets (McKinsey and Company, 2016).

Hong Kong's fast-growing economy prompted a study released in 1967 that suggested formation of a public transport company. This led to creation of the MTR Corporation (originally, Mass Transit Railway Corporation), established in 1975. The corporation is a segmental urban wealth fund managing an integrated rail transit system that owns rail infrastructure, the adjacent land, as well as much of the real estate. It runs the subway and rail system in Hong Kong. Although

listed on the local stock market in 2000, the government remains the majority shareholder. MTR operates a predominantly rail-based transportation system comprising domestic and cross-border services, a dedicated high-speed airport express railway, and a light rail system.

Copenhagen Port Development

The successful development of old port in Copenhagen will enable this UWF to contribute more than 33,000 new residential housing units, 100,000 workspaces, and a new university for more than 20,000 students, as well as new parks, retail, and cultural facilities.



Copenhagen's By og Havn / Photography by Tomtsya / Shutterstock.com

With the financial surplus from its operations, the UWF or the Copenhagen's By og Havn I/S (City & Port) as it is called, has been able to help fund part of the extension of the local metro system as well as other infrastructure investments required by the developments and the city. It does this through a direct dividend as well as with investments in the various projects.

City & Port is a UWF established by the city of Copenhagen in 2007, with 5 percent participation from the national government, to develop a number of specific urban districts. It is the largest UWF and urban development project in Europe at the moment, with a total area of 520 hectares and the result of a number of mergers of several development

companies and real estate assets owned by the local and national government. This includes waterfront districts in the Copenhagen harbor area totaling 210 hectares, as well as the landlocked Örestad-district of some 310 hectares between the city center and Copenhagen Kastrup airport.

United Kingdom Railway Stations

London Continental Railways Limited (LCR) is a segmental UWF with a primary focus on property development and land regeneration around a number of British railway stations such as in Birmingham, Manchester, and London. In London, one of the most successful developments is the King's Cross Station, once a derelict area of London.



King's cross development in London / Photography by cktravels.com / Shutterstock.com

The decision in 1996 to move the Channel Tunnel Rail Link, connecting Paris and London, from Waterloo to the St. Pancras railway station, next door to King's Cross, became the catalyst for change. It prompted the UK government to develop the King's Cross site through an independent holding company, with Argent, a UK property developer, acting as the partnership's asset manager.

King's Cross has always played a vital role in the commercial life of the capital. The 27-hectare development has a total of 8 million square feet of gross floor space of mixed-use development, including 3 million square feet of new workspace; about 500,000 square feet of retail, cafés, bars, restaurants, and leisure facilities; up to 2,000 new homes; a new university; and a range of educational, hotel, and cultural facilities.

Many of the old Victorian buildings around the site, including the Great Northern Hotel, have been refurbished and reopened. Organizations such as Google, Louis Vuitton, Universal Music, Havas, and the University of the Arts London have chosen to locate here. New public squares, gardens, and parks have opened, as well as restaurants, shops, and cafés. By 2020 up to 50,000 people will be studying, living, and working in King's Cross. In 2015, LCR sold its 36.5 percent shares to Australian Super for the equivalent of US\$400 million.

LCR's has other development projects in London, including the US\$2.6 billion International Quarter project in Stratford, centered on Stratford Regional and International Railway Stations in East London.



The Urban Wealth Fund Is the “Secret Sauce”

The best way for a government to manage commercial assets is to put them into an independent commercial holding company, a public wealth fund (PWF), or an urban wealth fund (UWF) at the local level and allow it to act professionally as if it were a publicly owned private equity fund. The fund would be managed at arm’s length from short-term political influence in a transparent, accountable manner using the relevant private-sector accounting and management practices. These institutions are the well-balanced compromise between public and private able to work on equal terms with the private sector but for the benefit of society as a whole. They keep public assets under government ownership while simultaneously preventing undue short-term political interference, as well as an undue transfer of public wealth to the private sector. The government appoints the auditors responsible for the portfolio and decides on the

dividend target and the list of assets that could eventually be sold when sufficiently developed but has no influence over the day-to-day management of the fund. This strict separation is the key to improved asset management.

Separating the management of commercial assets from the short-term political cycle fulfills at least two important objectives.

First, the UWF allows the government to solve the issue of its inherent inability to take on commercial risk without having to resort to outsourcing transactions, privatizations or public-private partnership (PPP) structures, many of which turn out to be suboptimal for taxpayers, as illustrated by Chicago’s unfortunate parking meter privatization deal. In the PPP and the privatization models, the private sector is agreeing to finance an asset and take on the commercial risk tied to managing it.

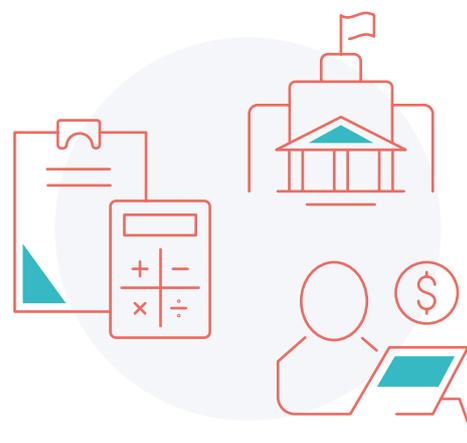


In exchange, private actors require a high premium—a cost that will be borne by the taxpayers or the users. By the nature of its setup, the UWF relieves the government from bearing the burden of commercial risk while keeping the assets under public ownership.

Second, the ability to use accrual accounting allows the UWF the use not only of a proper balance sheet, but one that is linked to the profit and loss account. This enables much closer alignment of the life cycle of the assets with the management of the investments.

While most OECD countries are now reporting on an accrual basis and showing a balance sheet, the majority are still budgeting and appropriating in a Medieval fashion, that is, on a cash basis. This means the balance sheet sits outside the budget process and for that reason is largely ignored.

The absence of a proper balance sheet, fully integrated into the budget, distorts the incentive for politicians. Governments today still focus mainly on debt, without recognizing the value of the physical assets, using measures such as net debt or debt/GDP as key targets. This has led to wasteful short-term decisions, such as privatizing water utilities because of the need for large-scale investments—something that would have otherwise negatively impacted the misguided debt measures.



With proper accounting, governments could focus on net worth—the measure used in the private sector—instead of a focus on debt alone. With net worth as the official key target, an increase in debt to finance an investment is matched with an increase in assets. This would then incentivize investments in government-owned assets rather than encouraging wholesale privatization, which may be for the wrong reasons and at the wrong price.

A focus on debt alone has also led to governments embracing much-criticized financial techniques such as the private finance initiative (PFI) or PPPs, where the main advantage was keeping debt off the government's balance sheet. However, it has often led to an undue transfer of public wealth to the private sector partners.

The initial costs of an asset, such as design and construction, are usually only a fraction of the total cost over its entire life, with the main costs consisting of maintenance and operations. As such, unlocking the value of public assets requires adopting an invest-



Photography by Blue Planet Studio / Shutterstock.com

ment perspective that extends way beyond a political cycle to ensure proper asset optimization. When the political calendar interferes, spending on assets maintenance competes with spending on education, healthcare, and other social investments that are systematically prioritized, as they are more popular among voters. Spending valuable taxpayer money on maintenance of assets can be politically risky —unless there is a balance sheet in a separate institutional setup, such as a UWF proving the money used has increased net wealth.

There is great value in creating awareness about the fact that the city owns a whole range of commercial assets that are not visible. As such, a crucial first step would be to produce an asset map, a feasibility study that clearly shows the value and revenue potential of the portfolio of assets.

The asset map is the spark that could generate the political will and incentivize governments to pursue professional management of its assets. Is the COVID-19 the impetus to induce governments to finally act?



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