Proper use of public commercial assets has been a core component of Singapore’s strategy to move the economy from developing to developed status in a single generation.
Putting Public Assets to Work

Dag Detter  David Walker  Laura Gibson  Hanan Amin-Salem

Governments around the world face pressure on their finances as well as a need to diversify their economies. By reassessing the potential of the commercial assets on their balance sheet, most notably real estate, they have the opportunity to bring about transformative change.

When Singapore and Jamaica achieved independence in the early 1960s, both island nations had roughly the same population, life expectancy, and GDP per capita.

Today they are poles apart. Not only has Singapore's population grown three times faster than Jamaica's, its per capita GDP is 10 times bigger, and its average life expectancy is 9 years longer. Against all odds, the tiny Asian nation with no significant resources, not even basic utilities such as water or the capacity to generate electricity, has thrived thanks to innovative and bold thinking.

There are many reasons to explain why Singapore performed so much better than its peers over the succeeding half century, including the development of human capital and a strong rule of law, but a major source of Singapore's economic attainment was the creation of robust economic institutions and the effective use of public assets.

Proper use of public commercial assets has been a core component of Singapore's strategy to move the economy from developing to developed status in a single generation. Singapore's founders introduced an innovative and unorthodox separation of economic policy from the management of public assets. At a time when free market capitalism was seen as essential to rebuilding the post-World War II global economy and creating full employment in many countries, Singapore opted to go the other way and recognized that a government, just like a corporation, has a balance sheet with both assets and liabilities that need active management. Most other governments around the world, many endowed with plentiful natural resources, kept managing their economies as if they only consisted of a current cash budget and a stock of public debt. The founding fathers of Singapore incorporated portfolios of assets inside public wealth funds; they delegated to professionals the responsibility for managing public commercial assets in holding companies that introduced private sector discipline and used governance tools borrowed from the private sector.

Professionalizing public financial management

Today, most governments around the world have delegated public management of several core financial operations to separate professional institutions, including government debt to the debt management office and interest rates to the central bank.

Similarly, some governments have delegated the management of surplus revenue from exports to sovereign wealth funds (SWFs). These SWFs – often in resource rich countries – have succeeded in generating wealth for society and future generations, by investing surplus revenue in well-developed international stock markets or in real estate in stable developed markets.

In many instances, high commodity prices – most especially of hydrocarbons – have benefited commodity exporters over the past decade both directly, by supplementing tax revenues with income from exports, and indirectly, through the dividends from the SWFs. In addition, public sector balance sheets have been bolstered by the continuous growth in the value of the SWFs. The proceeds have been used to modernize infrastructure and create employment.1

---

1Fasano-Filo and Iqbal, 2003
However, not all commodity exporting countries have been sufficiently far-sighted to create SWFs; and some SWFs have fallen victim to political interference or mis-guided investments. Moreover, many developing countries have not had the benefit of commodity riches to underpin their development via SWFs.

Both these countries, and commodity exporting countries in the wake of commodity price declines, are recognizing the need to diversify their economies, create additional government revenue and strengthen government balance sheets. The best response would be to take a leaf out of Singapore’s book and reassess the potential of the other commercial assets on the government balance sheet.

Public commercial assets
Apart from natural resources, the public sectors of many countries around the world own a huge variety of assets, including airports, ports, utilities, banks, and listed corporations. In most instances, by far the biggest asset is a large portfolio of real estate, the value of which is several times that of all other assets. Excluding public parks and historical heritage sites, these government-owned commercial real estate assets account for a significant portion of each country’s land. But governments often know about only a fraction of these properties, most of which are not visible on government accounts.

Operational assets owned at the national level are sometimes called state-owned enterprises (SOEs). Non-commodity SOEs, although less valuable than the real estate segment, play a fundamental role in many economies because they often operate in important sectors on which the broader economy depends – such as electricity, water, transportation, and telecommunication. For these reasons and others, the importance of well-governed SOEs cannot be overstated.

The size of the prize
The value of public assets is twice that of global stock markets – and twice global GDP, according to estimates from the IMF. But unlike listed equity assets, public wealth is unaudited, unsupervised, and often unregulated. Even worse, it is almost entirely unaccounted for. When developing their budgets, most governments largely ignore the assets they own and the value those assets could generate.

Since modern accounting was invented about 700 years ago, private sector corporates have had to develop high-quality information for decision-making and for stakeholders to be able to hold them accountable.

Listed stocks are constantly scrutinized by armies of analysts, brokers, investors, regulators, tax authorities, and media. The development of corporate governance systems and accounting standards has not only enabled capital market development but contributed mightily to the creation of the wealth we all enjoy today (see Box 1). But the same progress has not been made by governments.

### Two asset types

<table>
<thead>
<tr>
<th>Operational</th>
<th>Real</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transport</strong></td>
<td><strong>Buildings</strong></td>
</tr>
<tr>
<td>Roads (toll-roads)</td>
<td>Used (by public entity, or third party)</td>
</tr>
<tr>
<td>Rail/Subway</td>
<td>Unused</td>
</tr>
<tr>
<td>Airports</td>
<td></td>
</tr>
<tr>
<td><strong>Utilities</strong></td>
<td><strong>Land</strong></td>
</tr>
<tr>
<td>Energy</td>
<td>Developed land</td>
</tr>
<tr>
<td>Water</td>
<td>Undeveloped land</td>
</tr>
<tr>
<td><strong>Financial Services</strong></td>
<td></td>
</tr>
<tr>
<td>Banks</td>
<td></td>
</tr>
<tr>
<td>Insurance companies</td>
<td></td>
</tr>
<tr>
<td>Mortgage providers</td>
<td></td>
</tr>
</tbody>
</table>
Creating fiscal space and strengthening the public sector balance sheet using public wealth could be a critical tool in strengthening public finances and generating growth. Professional management of public assets could annually generate extra revenue equivalent to 3% of GDP each year, according to the IMF.

Box 1: Benefits of modern accounting and public financial management

Adopting accounting standards similar to those used by private companies and based on accrual accounting – which records income and expense when incurred rather than when cash changes hands – would be an important first step toward implementing a modern financial management system. The International Public Sector Accounting Standards Board recommends accrual accounting.

Most OECD countries now report on an accrual basis and show a balance sheet which reports the value of assets and liabilities at a point in time that yields important information about financial health. But the majority still budget and appropriate on a cash basis, which 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 understanding of financial status because governments focus mainly on debt, without recognizing the value of the physical assets, using measures such as “net debt” or “debt/GDP” as key targets. That can lead to bad decisions – such as privatizing a water system to generate funds to finance an infrastructure investment rather than borrowing.

With proper accounting, governments would focus on net worth – the value of assets less liabilities, the measure used in the private sector, instead of 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 create incentives to invest 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 public private partnerships (PPP), where the main advantage is keeping debt off the government’s balance sheet but often at the cost of an undue transfer of public wealth to the private sector partners.

Poor or risky accounting practices can shake, and ultimately reduce the confidence and trust felt by society. Accounting affects us all, as becomes apparent whenever there is a financial crisis, be it for banks, corporates or governments.

So far, only New Zealand has introduced modern accounting and integrated its balance sheet with the budget, using it as a tool for its budgeting, appropriations, and financial reporting. Since the public sector reforms in the mid-1980s, New Zealand has achieved and maintained significantly positive net worth, where most comparable governments, such as Australia and Canada, or larger countries such as the United Kingdom and the United States currently report a negative net worth.
Institutionalizing the management of public commercial assets

Increasing reliance on debt to finance public expenditures has led governments to professionalize public debt management in a drive to minimize the costs of central government financial management without incurring excessive risk. Similarly, independent central banks were created to oversee interest rates with the aim of keeping prices steady while politicians set broad economic policy goals.

In 1971, the newly independent state of Singapore created the Monetary Authority and delegated management of the asset side of its public sector balance sheet. Its commercial assets therefore became the management responsibility of professionals inside independent public wealth funds (see Box 2).

Goh Keng Swee, the deputy prime minister of Singapore at the time, explained why Singapore chose private sector discipline and governance tools borrowed from the private sector to manage commercial assets: “One of the tragic illusions that many countries entertain is the notion that politicians and civil servants can successfully perform entrepreneurial functions. It is curious that, in the face of overwhelming evidence to the contrary, the belief persists.”

Since then Singapore’s wealth management funds – Temasek and the Singapore Government Investment Corp (GIC) – have helped fund the economic development of the city-state, while the Housing Development Board (HDB) has provided almost 80% of its citizens with affordable and well-maintained public housing.
GIC is the sovereign wealth fund, the vehicle that helped professionalize management of the foreign reserves of the government, which is invested in financial assets outside of Singapore. But the public sector also needed a vehicle to manage its portfolio of domestic operational assets in a way that is recognized as the accepted international standard of asset management. In the private sector that vehicle is a corporate holding company with internationally accepted corporate governance and accounting standards. In the public sector the professional management vehicle for commercial assets is called a national wealth fund (NWF). There can be no professional management without such a vehicle. In Singapore the NWF is Temasek.

The joint market value of GIC and Temasek significantly exceeds Singapore's public liabilities and is more than 1.7 times the annual GDP of the city state. As a result of this strong balance sheet, Singapore has consistently received the top credit rating — AAA — from the three main credit-rating agencies. Both funds deliver a significant surplus to the government.

While policymakers in many countries have focused on managing debt for decades, they have largely ignored the question of public wealth. In most countries public wealth exceeds public debt: managing that wealth better could help to reduce excess indebtedness while providing the basis for future economic growth.

The longstanding debate between those who argue for privatized economies and those who champion nationalization misses the point: what matters is the quality of asset management. When it comes to public wealth the focus should be on yield rather than ownership. Improvements in public wealth management could generate returns greater than the world’s current combined investment in infrastructure. Improvements in the transparency of public wealth management could also help fight corruption.

Professionalizing the management of public commercial assets

Government ownership has historically given rise to complex governance and regulatory risks that often prevented SOEs from creating optimal value for the economy. Inefficient SOEs and other public assets, such as real estate that remains underdeveloped or mismanaged, create a drag on the economy and crowd out private sector initiatives and foreign direct investment.

In the worst case, SOEs are used for political patronage or self-enrichment, which erodes the trust of citizens, international investors, and potential partners. Moreover, government ownership is often decentralized along line ministries with an inherent conflict of interest between the ministry’s ownership and its regulatory responsibility, which can add to the suboptimal use of public resources. Governance of public commercial assets is further constrained by a lack of transparency and adherence to international accounting standards.

Box 2: Sovereign vs national wealth funds

A Sovereign Wealth Fund (SWF) is primarily concerned with managing reserve liquidity, typically investing in securities traded on major mature markets.

SWFs are designed to optimize a portfolio by trading securities to achieve balance between risk and returns.

An example is GIC of Singapore.

A National Wealth Fund (NWF) is an asset manager, concerned with active management of a portfolio of operational assets.

NWFs seek to maximize the portfolio value through active management including the development, restructuring, and monetization of the individual assets.

An example is Temasek of Singapore.

---

2 OECD, Corporate Governance in MENA, 2019
While most developed economies have moved to a centralized management of assets, the best results have been achieved when assets have been consolidated inside an independent holding company, at arms-length from short-term political influence – as occurred with Temasek in Singapore (see Box 3) or Solidium in Finland.

**Box 3: Temasek: The iconic state holding company**

Temasek was established in 1974 as a separate holding company that was an active investor and shareholder in commercial enterprises and real estate to enable the government to maximize long-term shareholder value. Temasek consolidated all of the commercial assets owned by the government: existing holding companies and state-owned enterprises; previously existing monopolies and utilities that had recently incorporated and still resided within the respective ministries; and some real estate.

Temasek was used to separate the regulatory and policymaking functions of government from its role as a shareholder of commercial entities.

Since its inception, total shareholder return, measured in Singapore dollars, has averaged 15% per year.

Many of Temasek’s holdings are now world-leading companies within their sector such as the telecom operator Singtel, the largest company by market capitalization on the Singapore stock exchange; DBS Bank, the largest in Southeast Asia; and PSA International, one of the largest port operators in the world.

Other well-known brands within Temasek include Singapore Airlines and ST Engineering, one of Asia’s largest defense and engineering groups, as well as CapitaLand, one of Asia’s largest real estate companies.

Temasek’s political insulation is reinforced by professional boards and a risk management system that puts responsibility and accountability solidly with the board of each holding. The board of Temasek, as well as those of its holdings, consists of independent non-executive directors recruited on merit. Almost half of both management and staff are non-Singaporeans. Transparency and clear objectives are also strengthened by Temasek having a credit rating.

Once an asset is inside a holding company and subject to proper accounting standards, a comprehensive business plan will help put it to its most productive use and make clear the opportunity cost of using the asset in a sub-optimal way.

Implementing hands-on active asset management will allow an economy to commercialize, optimize, and rationalize its commercial portfolio to the benefit of society. Commercialization of public assets requires that a comprehensive business plan reviews all assets, including real estate, that are unused, used by third parties, or directly used in the provision of public services, but that can either be reallocated or used to generate ancillary income.

Optimization requires economies of scale be achieved across the entire portfolio, which includes rationalization – or sales of mature assets to generate funds to reinvest in higher-yielding assets.

Monies generated from rationalization activities should be first made available as a source of funding for the achievement of the business plan and then other investments such as infrastructure and housing. Alternatively, the yield could be used for economic development in other areas of benefit to society, such as schools or hospitals.
National wealth funds enable a shift in state assets toward infrastructure

A NWF acting as a holding company for public commercial assets offers a politically palatable way to shift state assets toward infrastructure in a way that could achieve three goals: increasing funding of infrastructure, putting infrastructure decisions on a sounder economic footing, and reducing government’s direct and politically-motivated access to those assets.

NWFs can help governments manage projects and encourage FDI by providing a window to international best practices and hands-on experience and management. With the same capacity to manage commercial risk as any private sector partner, any PPP would be on equal terms with any private sector partner thereby significantly reducing, or even eliminating, the risk of an undue transfer of value to the private sector, one of the common criticisms against PPPs.

SWFs are in a financial position to invest in large infrastructure projects, but their expertise is financial rather than structural and operational and an important question is whether they have the competence that successful infrastructure investments require. National infrastructure investment can be boosted and managed better by letting an NWF shift or sell state assets in other commercial holdings and invest in infrastructure consortia in their own country. In doing so, three measures that reinforce each other are important.

First, an NWF that invests in infrastructure should solely focus on profitability. Its job is to manage the value of operational assets, ensure economic soundness, and try to find structural deals that increase profitability. For example, many roads and railroad investments can become profitable if the increase in land value around these investments is internalized. An NWF is in a position to buy land surrounding an investment, making it profitable, or the NWF may already own the land through another of its holdings.

Using an NWF to shift public assets toward infrastructure also helps politically. Governments often keep state enterprises merely because there is no strong political belief in privatization. But a somewhat independent NWF that can sell excess real estate or non-essential SOEs and reinvest the proceeds in profitable infrastructure would not be seen as relinquishing net wealth to the private sector, but merely shifting wealth within its portfolio.

Second, infrastructure projects that are not commercially profitable, but have a positive net social value, should be paid for by state or local governments in the form of “payments for use.” For example, a consortium owned by the NWF alone or together with private owners may make a contract with the state or a local government in which the consortium builds a road and the state commits to pay an annual usage fee that can vary depending on road accessibility and other quality parameters. This is already a common model in many PPP projects. For example, governments pay a PPP consortium annually for provision of a road or railroad often in relation to the quality the PPP achieves. That focuses governments on the value of a service to the consumer, rather than entangling them in difficult investment decisions that also offer temptations for corruption.

Third, an independent institute should continually evaluate the social profitability of infrastructure services that governments purchase. The evaluation should use internationally accepted tools to determine how to factor in environmental and social values. While the recommendations of such an independent institute probably would not be binding, they would make the economic rationale for various projects more transparent and impose a political cost on governments that invest in bridges to nowhere.
Putting Public Assets to Work

There are a number of examples of governments using consolidated public commercial real estate assets inside a holding company to properly develop portfolios—both by segment and by location. Geographically it is most common at the local government level—as when the City of Hamburg (Germany) expanded by developing its derelict urban harbor area into one of the most attractive residential and commercial areas of the city—complete with kindergartens, primary and secondary schools, universities, and a world-class concert hall. Also, in the 1990s, economic malaise and high unemployment impelled Copenhagen’s leaders to get creative. A professionally managed public wealth fund consolidated the city’s old harbor area and a former military garrison on the city’s outskirts. Beyond transforming Copenhagen’s harbor district into a highly desirable area, income from the fund enabled the government to build a transit system without dipping into tax revenues.

Segmental holding companies have such operating assets as airports, postal systems, highways, ports, and railways. They all have real estate assets that could generate substantial value if managed professionally in independent holding companies. For example, Hong Kong, aware of its fiscal limitations, set up MTR, which found a way to build a subway and railway system the size of New York City’s without using a single tax dollar. To do so MTR developed the real estate adjacent to its stations. London Continental Railways in the United Kingdom led the remarkable transformation of the abandoned area around King’s Cross Station into a hub for both tech start-ups and tech giants, such as Facebook and Google. The site also attracted notable academic and cultural institutions and has hotels, residential, and recreational areas.
Impact on the sovereign rating

Lastly, improved management of government assets may also have a positive impact on a country’s sovereign credit rating, which affects its cost of borrowing. Clearly, the monetization of public assets generates receipts that can be used to pay down existing debt, to reduce the need for new borrowing or to build the government’s financial buffers. A reduction in a government’s debt load, or slowdown in its pace of accumulation, and an increase in government financial assets directly improve key metrics the three global rating agencies use in their sovereign rating models.

In addition to assisting sovereign credit ratings, more efficiently managed assets would contribute to a higher rate of real GDP growth, generate dividends or other cash flows for the government budget, and lower operating costs, all a major benefit to society.

To many developing countries around the world, the stability and wealth of Singapore might appear unachievable. But simply by looking at public commercial assets in a fresh way and putting in place the structures for professional, independent management, all countries have the potential to optimize the value of these assets to the benefit of the economy and all citizens. It is almost 60 years since Singapore and Jamaica gained independence and set off on starkly different development tracks; there is no reason why Jamaica cannot pull level with Singapore in the decades to come.

A reduction in a government’s debt load, or slowdown in its pace of accumulation, and an increase in government financial assets directly improve key metrics the three global rating agencies use in their sovereign rating models.