

# IMF Working Paper

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## Another Look at Governments' Balance Sheets: The Role of Nonfinancial Assets

*Elva Bova, Robert Dippelsman, Kara Rideout, and  
Andrea Schaechter*

## **IMF Working Paper**

Fiscal Affairs Department and Statistics Department

### **Another Look at Governments' Balance Sheets: The Role of Nonfinancial Assets**

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Andrea Schaechter**

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### **Abstract**

When discussing debt reduction strategies, little attention has been given to the role of governments' nonfinancial assets. This is in part because data are scarce. Drawing on various data sources, this paper looks at the size, composition, and management of state-owned nonfinancial assets across 32 economies, with particular focus on the advanced G-20 economies. We find that reported nonfinancial assets comprise mostly structures (such as roads and buildings) and, when valued, land. These assets have increased over time, mostly due to higher property and commodity prices, and are, in large part, owned by subnational governments. Many countries have launched reforms with a view to streamlining public administrations, but receipts and savings have been rather small so far. Governments tend to consider relatively small sets of assets to be disposable, though preferences could change in the future. A potential source for future revenues could be greater reliance on user charges, such as road tolls. In most cases, a first step for more effective asset management has to be the expansion and improvement of data compilation.

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## I. INTRODUCTION<sup>1</sup>

**Identifying new options to manage government assets and liabilities requires gaining a complete picture of a government’s asset position, including nonfinancial assets.** The analysis of fiscal sustainability has, in the past, largely centered on the concept of gross debt. However, recognizing that gross debt ratios may overstate the risks to fiscal sustainability, greater attention also has been given to the asset side of governments. A first step has frequently been the reporting of data on net debt. This concept subtracts from government gross debt the value of any financial asset in the form of debt instruments that could be liquidated to reduce gross debt, or whose yield could be used to service gross debt.<sup>2</sup> A second step has been the analysis of government-held equity (such as state-owned enterprises), a form of financial assets not included in the definition of net debt. Sales of equity (privatization) have yielded substantial proceeds in many countries, enabling gross debt to be reduced. A third potential avenue to reduce debt and improve budget balances is the disposal of nonfinancial assets, introduction of user fees, or more effective management.

**This paper analyzes trends in nonfinancial assets and discusses accounting practices.** Nonfinancial assets comprise mostly structures (such as roads and buildings) and land. Their values have increased over time mostly due to higher property and commodity prices, and nonfinancial assets are largely owned by subnational governments. To our knowledge, this paper is the first study to report and analyze data on nonfinancial assets systematically for a wide range of countries, drawing on multiple data sources.<sup>3</sup> Though large data gaps persist—for example, only few countries report values of land and subsoil assets—and methodologies differ across countries, the analysis brings us closer to obtaining an indicator of the governments’ net worth.

**By reviewing country experiences with nonfinancial assets management, the paper identifies policy options.** Many countries have launched reforms with a view to streamlining public administrations, but receipts and savings have been rather small thus far. Because

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<sup>1</sup> We would like to thank Claudia Dziobek and Martine Guerguil for helpful comments, participants of the IMF seminar on “Government Nonfinancial Assets” (January 30, 2013) for their feedback, as well as a number of national officials for their assistance with obtaining and interpreting the data. Special thanks go to Kim Yoon, who prepared the case study on Korea. Nathalie Carcenac provided excellent research assistance.

<sup>2</sup> According to the *Public Sector Debt Statistics Guide* financial assets held as debt instruments (excluding equity and financial derivatives) should be deducted from gross debt to derive a net debt concept (IMF, 2011a). However, in practice and due to limited data availability, many countries include only a subset of liquid assets, in particular cash and deposits (IMF, 2011b).

<sup>3</sup> Data on nonfinancial assets are usually compiled for the economy as a whole as part of national accounts and to estimate consumption of fixed capital. However, recent and gradual extension of reporting for the general government now also allows analysis focusing on public finances.

governments tend to hold nonfinancial assets for use, they tend to consider relatively small sets of assets to be disposable. Clearly, not all nonfinancial assets can, or should, be sold, but preferences may change with economic and technological developments as public services can be provided in new ways (e.g., e-government). The nature of the asset, and availability of a market, must factor into the decision to dispose of the asset, as should the timing, so as to avoid fire sales and possibly depressing asset prices. Assets may, for example, ensure environmental sustainability (such as land, forests, and rivers), be used for military and security purposes, or have significant impact on the preservation of culture and national heritage. Additionally, the sale may entail future revenue losses (if the assets are a source of income) or higher spending (e.g., if government buildings are sold, requiring alternative space to be leased), and may also affect intergenerational equity. Nevertheless, given the high level of nonfinancial assets in some countries, especially held at subnational levels, disposal could be an avenue for addressing high gross indebtedness.<sup>4</sup> Another potential source for future revenues could come from greater reliance on user charges, such as road tolls.

**The remainder of the paper is structured as follows:** Section II gives an overview of the concept of nonfinancial assets, identifies data from a range of international sources, as well as data gaps, and analyzes trends across 32 advanced and emerging economies. Section III digs more deeply into the data (partly by using national sources), and reviews strategies for managing and disposing of nonfinancial assets in the advanced G-20 economies. Section IV reviews measurement methods and accounting practices for nonfinancial assets, and identifies what is impeding a broader coverage and more comparable data. Section V concludes.

## II. A LOOK AT THE DATA: CROSS-COUNTRY COMPARISON OF NONFINANCIAL ASSETS

### A. Data Sources and Availability

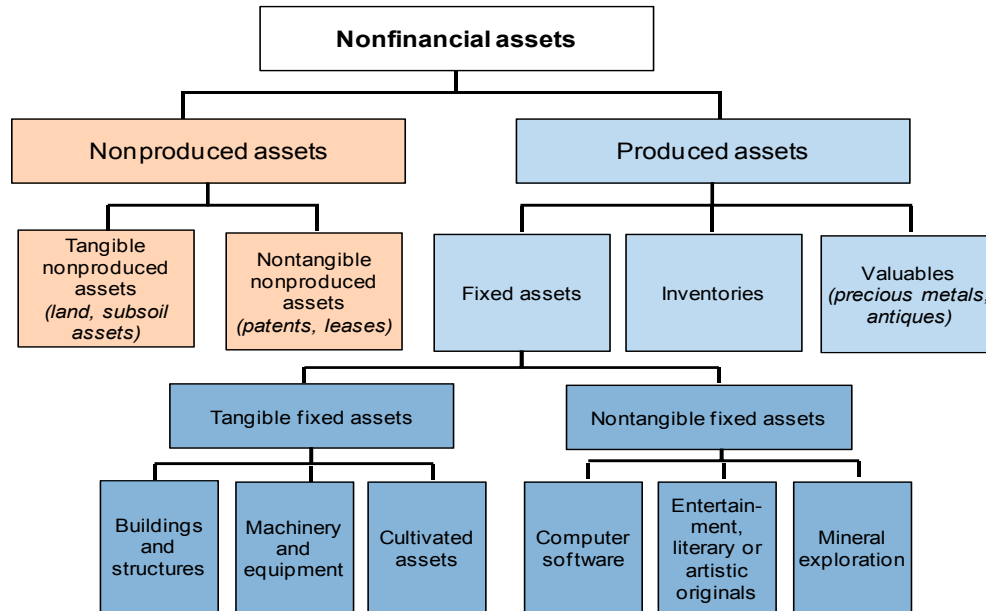
**Nonfinancial assets are stores of values.** The *System of National Accounts 2008 (2008 SNA)* defines nonfinancial assets as all economic assets other than financial assets, which do not represent claims on other units, but are stores of value and provide benefits either through their use in the production of goods and services or in the form of property income. Nonfinancial assets are generally divided into those that are produced and nonproduced (Figure 1). Following the *2008 SNA* terminology, produced assets include (i) fixed assets, namely building and structures (like dwellings owned by the government, roads and other infrastructure), machinery and equipment, computer software and, since 2008, research and development; (ii) inventories; and (iii) valuables (such as works of art, precious metals and

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<sup>4</sup> The government's net worth would only increase if the assets being sold are more valuable when managed by the private sector than by being in public hands.

stones). In turn, the OECD classification groups nonproduced assets into those that are tangible (such as land and subsoil resources) and nontangible (such as leases and licenses).<sup>5</sup>

**Figure 1. Components of Nonfinancial Assets**



Source: German Federal Statistical Office, National Accounts, Fixed Assets by Sector; [https://www.destatis.de/DE/Publikationen/Thematisch/VolkswirtschaftlicheGesamtrechnungen/Vermögensrechnung/VermögensbilanzenPDF\\_5816103.pdf?\\_\\_blob=publicationFile](https://www.destatis.de/DE/Publikationen/Thematisch/VolkswirtschaftlicheGesamtrechnungen/Vermögensrechnung/VermögensbilanzenPDF_5816103.pdf?__blob=publicationFile).

**Availability of comparable cross-country data is limited.** International data sources for nonfinancial assets are the OECD, Eurostat, and the IMF-Government Finance Statistics (GFS) databases, which use somewhat different methodologies. The first two follow the *1993 SNA* and the *European System of Accounts 1995 (ESA95)*, while the IMF-GFS follows the GFS statistical reporting system. While the statistical definitions are conceptually harmonized, the data can differ in practice because different agencies are responsible for producing the data and may have different coverage and methods. The OECD reports data for at least one category of nonfinancial assets covering the general government of 22 economies. For most countries data are available from 1995, while for a couple, coverage begins in 1970 (Table 1). Eurostat provides data for 20 countries of the European Union, of which 18 are also covered by the OECD, while Latvia and Lithuania are only included by

<sup>5</sup> The *2008 SNA* classification splits nonproduced assets into three different categories: natural resources; contracts, leases, and licenses; and purchased goodwill and marketing assets. In this paper, however, we follow the classification presented in Figure 1 (in line with the *1993 SNA* and *ESA95*) since the OECD data are still presented in that format. For a more detailed description of nonfinancial assets categories and subcategories, see Section IV.

Eurostat. The IMF-GFS database reports data for 16 countries, of which only five countries overlap with the OECD database though they also include seven low-income economies (Table 2). For most countries, data start from the late 1990s/ early 2000s, covering only the central government in some cases.

**Table 1: OECD and Eurostat Data Coverage of Nonfinancial Assets**

Australia	1988–2010	Japan	2001-10
Austria	1995–2011	Korea	1997-2010
Belgium	1995–2011	Latvia	2000-10
Canada	1970–2010	Lithuania	1995-2011
Czech Rep.	1995–2011	Luxembourg	1995-2010
Estonia	2001–09	Netherlands	1995-2011
Finland	1975–2011	Poland	1995-2010
France	1978–2011	Slovak Republic	1995-2011
Germany	1995–2011	Slovenia	1995-2011
Hungary	1995–2010	Sweden	1995-2010
Israel	1995–2007	United Kingdom	1995-2011
Italy	1995–2010	United States	1970-2011

Sources: OECD, and Eurostat.

Note: This includes all countries reporting at least one category of nonfinancial assets. Estonia, Italy, Poland, and Sweden report only dwellings. Therefore, these countries are not included in the further data analysis, except for Italy, for which the 2004 national source data are used, and which is included in the case studies (Section III).

**Table 2: GFS Data Coverage of Nonfinancial Assets**

Australia	1999–2010	Hong Kong SAR	2001–10
Barbados <sup>1</sup>	2008–10	Japan	2001–10
Bolivia	2003–07	New Zealand	2002–10
Canada	1991–2010	Norway	2000–10
Colombia	2003–10	Russia	2001–10
Costa Rica <sup>1</sup>	2008–10	Slovak Rep.	2003–10
Dominican Rep. <sup>1</sup>	2006	Switzerland	2002–09
El Salvador <sup>1</sup>	2002–10	United States	2002–10

<sup>1</sup> For these countries data are for the central government.

Source: International Monetary Fund, Government Finance Statistics Database.

Note: This includes all countries reporting at least one category of nonfinancial assets.

**Reported data are incomplete.** Of the 35 countries that report any data on nonfinancial assets to the OECD, Eurostat and the GFS Database, only 16 show data on the total nonfinancial assets (Appendix Table 1).<sup>6</sup> For the analysis in this paper, we show the sum of all reported subcategories as overall nonfinancial assets. Countries report mostly produced assets, and within these, typically buildings and structures. Data on nontangible fixed assets (usually computer software) are available for about one-third of the sample. The category “entertainment, literary or artistic originals” is quantified only by Australia, France, and Slovenia. Nonproduced assets could be potentially important sources of wealth and revenue for governments and are as high as 69 percent of GDP in Australia, 48 percent of GDP in

<sup>6</sup> Of the 35 countries, Estonia, Italy, Poland, and Sweden report only dwellings. Therefore, these countries are not included in the further data analysis, except for Italy, for which we used the 2004 national source data and which is included in the case studies (Section III).



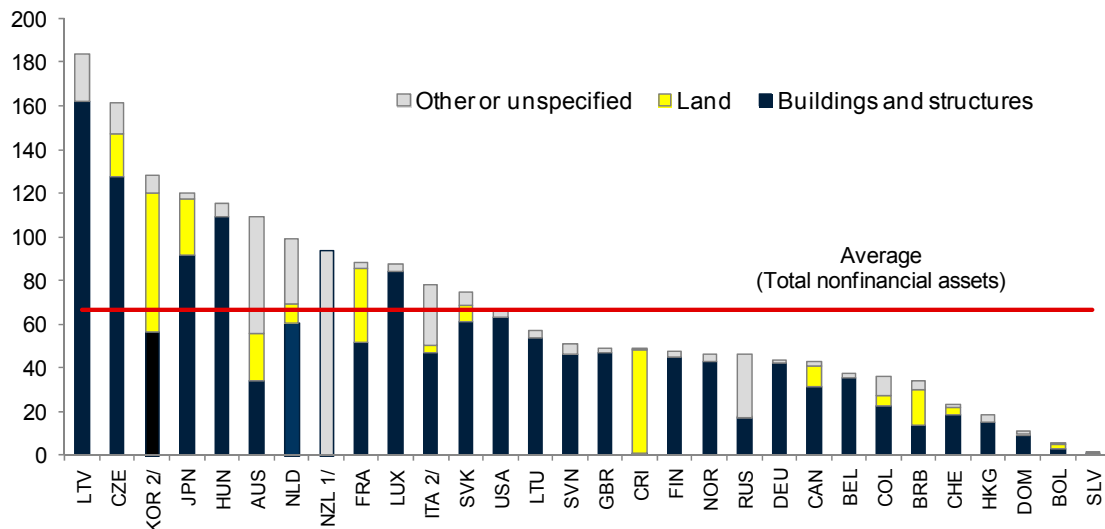
Costa Rica, and 26 percent of GDP in Japan. However, for more than one-half of the countries covered here, data on these items are not available.<sup>7</sup>

**Caution is warranted for cross-country comparisons.** The information presented here should be viewed as a first step in drawing a fuller picture of governments' balance sheets. To allow for a more comprehensive analysis, more development of the statistics is needed to achieve broader data coverage and to address differences in accounting methods. In part to address these caveats, Section III looks at selected country cases for which more detailed national data are available, and Section IV highlights some data gaps and differences.

### B. A Snapshot of Nonfinancial Assets: Level and Composition

**The levels of nonfinancial assets differ widely across countries.** The levels average 67 percent of GDP (median 50 percent of GDP) with a very wide dispersion (Figure 2). The levels range from over 120 percent of GDP for the Czech Republic, Japan, Korea, and Latvia to less than 25 percent of GDP for Bolivia, El Salvador, Hong Kong SAR, and Switzerland. These sharp disparities appear to reflect a range of factors, such as economic structure and policies on holding assets, but also data issues such as coverage and valuation techniques.

**Figure 2. Key Components of Reported Nonfinancial Assets, 2011**  
(Percent of GDP)



Sources: OECD, Eurostat, and IMF Government Finance Statistics Database.

Note: If no total is reported, the chart shows the sum of the reported sub-categories. Caution is needed when comparing data since country coverage differs.

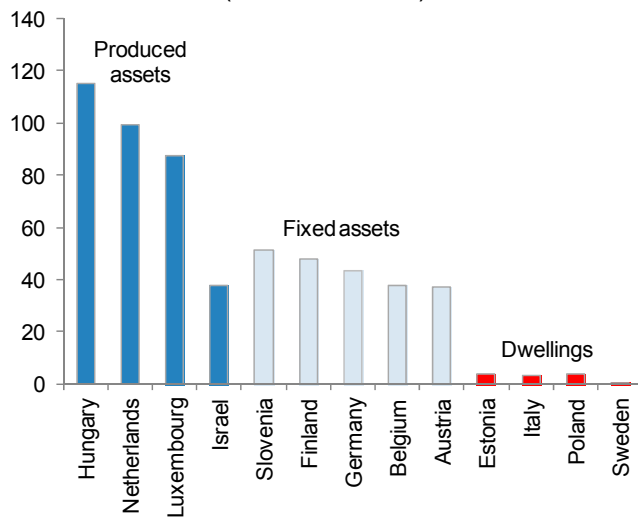
1/ No breakdown of total nonfinancial assets is available.

2/ National data. For Korea, buildings and structures correspond to the total tangible fixed assets.

<sup>7</sup> For a detailed account of the stock of nonfinancial assets per category, latest year available, as well as data sources, see Appendix Table 1.

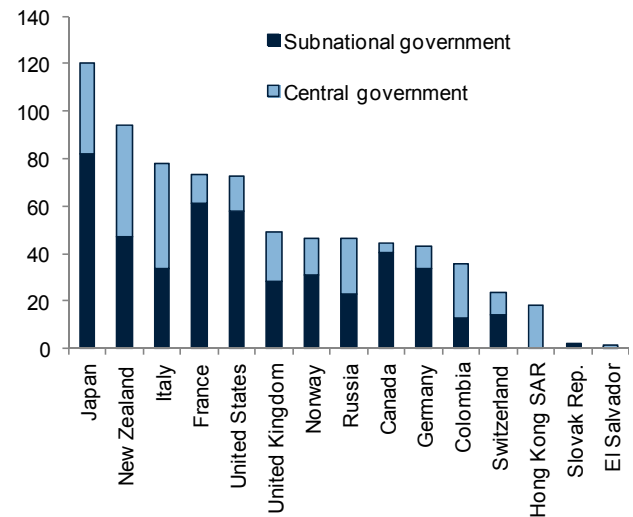
**The stock of nonfinancial assets is, on average, higher for those economies with a more comprehensive coverage.** This refers to the government levels included, as well as the range of assets, which tend to widen for advanced economies (Figure 3). Among advanced economies nonfinancial assets are higher for those countries that also report nonproduced assets, such as Australia, France, Japan, and Korea. Another indication that caution is needed in interpreting the data is, for example, the large variance in the value of reported buildings and structures across transition economies, ranging from over 100 percent of GDP in some, to less than 20 percent in others, without obvious large differences relating to the remaining role of state-ownership of these assets.

**Figure 3. Nonfinancial Assets in Countries Reporting Only Subcategories**  
(Percent of GDP)



Sources: OECD, and IMF Government Finance Statistics Database.

**Figure 4. The Role of Subnational Governments**  
(Percent of GDP)



Sources: IMF Government Finance Statistics Database, and national authorities.

**Buildings and structures are the largest component of government nonfinancial assets.** When a breakdown between produced and nonproduced assets is available, produced assets make up more than 65 percent of the total, except for Costa Rica and Australia, where they account for 2 and 37 percent of the total, respectively. Produced assets are predominantly composed of non-dwelling buildings and infrastructure while machinery and equipment account for less than one-tenth of total assets. Nontangible fixed assets, valuables, and inventories do not surpass 1.5 percent of GDP in any economy except in the Czech Republic (7.3 percent of GDP), Latvia (2.9 percent of GDP) and Russia (5 percent of GDP).<sup>8</sup> Land is the largest component of nonproduced assets, and it is

<sup>8</sup> For the Czech Republic, this relatively high value of inventories could incorporate standing timber (timber which is to be cut and then sold), which is recorded in inventories (Ondrus, 2011).

particularly high in Australia, Costa Rica, France, Japan, and Korea. Australia, Colombia, and the Netherlands are the only countries also to report subsoil assets (part of nonproduced assets) and they are quite sizable in these countries (Figure 6).

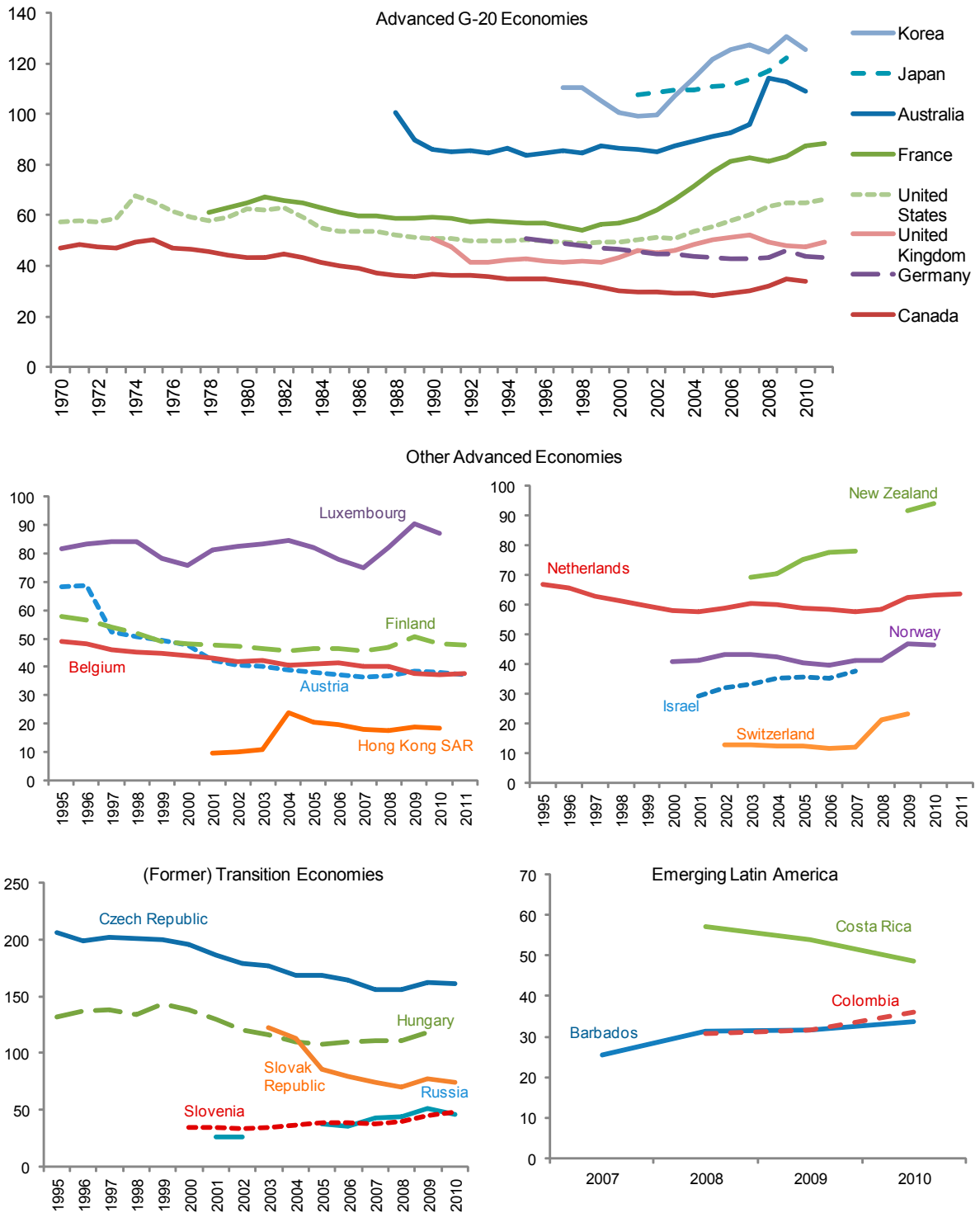
**A large portion of assets is owned by lower-level governments.** On average, subnational governments hold more than one-half of total nonfinancial assets. The share of regional and local governments is particularly high in federal states, such as Canada, Germany, and the United States, where subnational government assets exceed the holdings of the central government by a ratio of at least four (Figure 4). France is an example of a unitary state where most nonfinancial assets, including large reported values of land (which are not reported for several of the other countries), are in the hands of local governments.

### C. Trends in Nonfinancial Assets

**The stock of nonfinancial assets has increased in most countries.** From the late 1990s on, most advanced and emerging economies, in particular the G-20, report rising nonfinancial assets relative to GDP (Figure 5). The acceleration in the mid-2000s reflects the housing, land, and commodity price booms. With the crisis and correction of asset price bubbles, nonfinancial assets have declined, though at only a fraction of the earlier increase, with corrections largest in Australia, Korea, and Russia. Abstracting from short-term developments, nonfinancial asset values have trended down in a few advanced economies (Austria, Belgium, Canada, Finland, and Germany) where asset prices either remained more stable (e.g., Austria, Finland, and Germany), asset price increases were not reported in nonfinancial assets (e.g., Belgium where the share of “other structures” is large), and/or the government divested some assets. Sizeable declines in nonfinancial assets as part of restitution of properties and privatization occurred in the Czech and Slovak Republics.

**Detailed data for a few countries indicate how they benefited from valuation increases** (see Section III). In Australia, the rise in nonfinancial assets was due to higher prices partly for iron ore and coal, which nearly quadrupled between 2004 and 2008, and partly for land. In France, Japan, Korea, and the United States, the increase was associated with higher property prices (Figure 5). These were reflected in a higher value of land for France, of structures for Japan, and the United States, and of both structures and land for Korea. For the Netherlands, the increase was due to both higher oil and property prices, reflected, respectively, in higher subsoil assets and values for buildings (Figure 6).

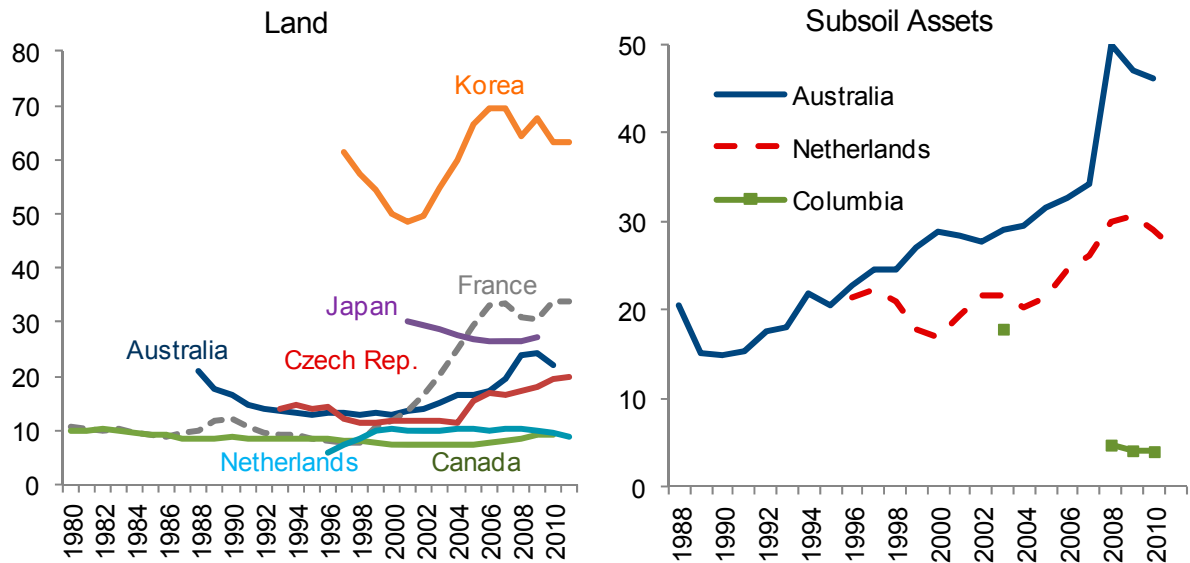
**Figure 5. Trends in Nonfinancial Assets by Country Groups**  
(Percent of GDP)



Sources: OECD, and IMF Government Finance Statistics Database.

Notes: Some countries report only sub-categories of nonfinancial assets, and some report only data for the central government. See Appendix Table 1 for country details.

**Figure 6. Countries Reporting Value of Land and Subsoil Assets**  
(Percent of GDP)

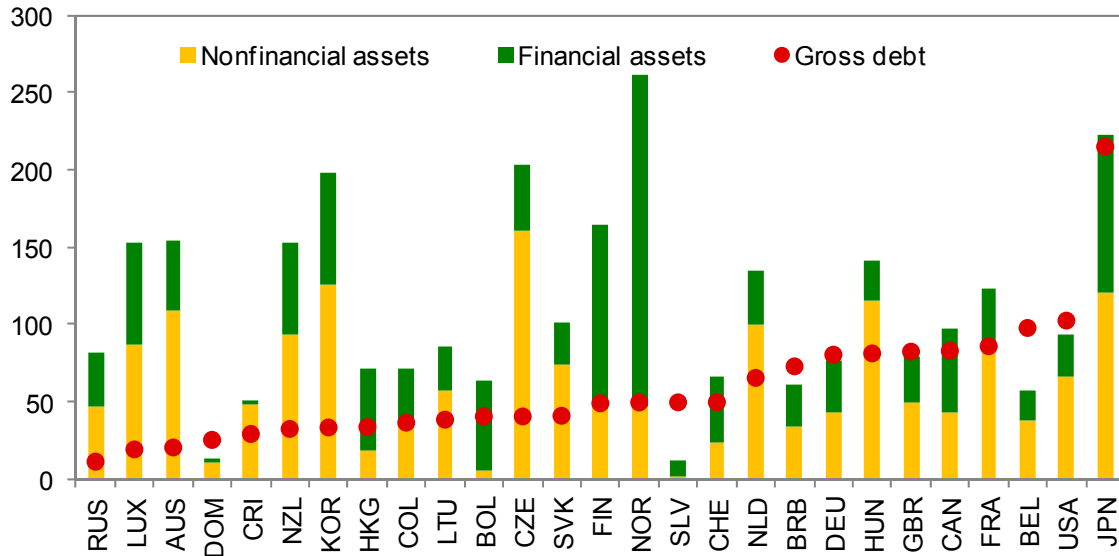


Sources: OECD, and national data for Korea.

#### D. Government Assets and Debt

**Nonfinancial assets are usually higher than financial assets, and total assets typically exceed general government gross debt.** Nonfinancial assets surpass financial assets on average, by a ratio of 1.2 to 1.3 (Figure 7). The ratio is highest in Costa Rica, where nonfinancial assets make up nearly 95 percent of total assets. Other countries with relatively high nonfinancial assets include the Czech Republic (ratio of 4:1) and Australia, France, and the United States (ratio of 2:1). When taking a holistic view of the balance sheet, total reported assets exceed or equal reported gross debt in most countries, including those in high debt countries, such as France, Germany, Japan, the United Kingdom, and the United States. Since the valuation of assets does not necessarily reflect the net present value of the income stream that could be generated from these assets, it is difficult to make a strong inference for debt sustainability. Also, debt measures do not usually account for off-budget and contingent liabilities, including future pension liabilities.

**Figure 7. General Government Assets and Liabilities**  
(Percent of GDP)



Source: OECD, Eurostat, IMF Government Finance Statistics Database, and IMF International Finance Statistics Database.

Notes: Some countries report only sub-categories of nonfinancial assets and some report only data for the central government. See Appendix Table 1 for country details.

### III. COUNTRY CASE STUDIES

**This section looks at the advanced G-20 economies in more detail.** These countries tend to make more comprehensive time series data available through national sources—though many data gaps and problems of comparability persist—and/or they have relatively high gross debt ratios. In addition to the data analysis, the section analyzes these governments’ asset management strategies.

**Even among advanced G-20 countries, the levels of nonfinancial assets differ widely, but tend to be higher than they are in the full sample.** Nonfinancial assets range from over 120 percent of GDP in Japan and Korea to 40 to 50 percent in Germany and the United Kingdom. Some of the countries with the highest asset levels are also those that report high values of land (in particular, Japan, Korea, and France) or subsoil assets (Australia). This important information is missing for some countries (Canada, which reports lands but not subsoil assets, as well as Germany, Italy, the United Kingdom, and the United States). National source data reveal some interesting country-specific details. These include a higher-than-average level of machinery and equipment in the United States (largely for defense purposes), the impact of different valuation methods in Australia and Korea, and the share of nonfinancial assets in public nonfinancial corporations in the United Kingdom.

**Several countries have launched reforms with a view to streamlining public administrations.** These reforms include the disposal of government property and

outsourcing of the management function, mostly at the central government level. However, receipts and savings from reforms have been very small so far. A core reason is that what is considered “saleable” tends to be relatively limited in most economies (e.g., 4 percent of GDP in Italy, and up to 7 percent of GDP in Japan).<sup>9, 10</sup> This reflects, in part, a preference for delivering certain services via the state. Moreover, some sales could be problematic for long-term sustainability, if the one-off receipts are used for permanent spending. More promising sources for future revenues might include the collection of user charges where they are low or not yet imposed (such as road tolls), including through public-private partnerships, since a large share of nonfinancial assets is public infrastructure. In countries with subsoil assets, exploitation could yield significant future revenues.

### A. Australia

**Australia has comprehensive data on its nonfinancial assets.** The Australian Bureau of Statistics has been compiling data on nonfinancial assets since the late 1980s. Australia is one of the few countries to report values of its natural resources. It values its subsoil assets on the basis of a net present value of future estimated flows, which combines an estimate of proven reserves and related expected future income flows.<sup>11</sup>

**Data reported to the OECD and GFS vary greatly due to diverse valuation methods.**

Total nonfinancial assets reported to the OECD are about 45 percent of GDP higher than those reported to the GFS (Table 3). This difference reflects the inconsistent nonfinancial asset coverage (accounting for about 85 percent of the disparity) and valuation methodology (accounting for about 15 percent of the difference) used by the Australian Bureau of Statistics. OECD data are based on the Australian System of National Accounts, and include estimates for subsoil assets while the GFS data do not. In addition, the Australian Bureau of Statistics uses a perpetual inventory modeling technique to value nonfinancial assets, which it reports to the OECD whereas the bureau’s GFS data rely on administrative sources

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<sup>9</sup> While some sales, especially at the subnational level could contribute to lowering debt, they tend to be very controversial given the diverse functions of nonfinancial assets. For example, a planned auction of a Henry Moore sculpture by a local government recently made headlines in the United Kingdom. The Borough of Tower Hamlets in the East End of London bought the sculpture from the artist in 1960 for the significantly reduced price of £6,000, with the understanding that it would be displayed in a public space. Given the ongoing budget pressures the council now plans to auction it, and is looking at a potential sale price of \$32 million (*Financial Times*, 2012).

<sup>10</sup> For Japan, nonfinancial assets that IMF staff consider could potentially be disposed of in the long term, are those that are under the direct control of Ministry of Finance. Data are from the Japan Cabinet Office of the Ministry of Finance. Data from Italy are from IntesaSanPaolo (2012). The Italian government has announced plans to sell real estate assets of about €15–20 billion per year for the next five years.

<sup>11</sup> For more details, see *Australian System of National Accounts, Concepts Sources and Methods* 2012.

measuring nonfinancial assets. This practice of utilizing separate source data can be confusing for data users and highlights the importance of consistent data sources when compiling GFS and national accounts data sets.

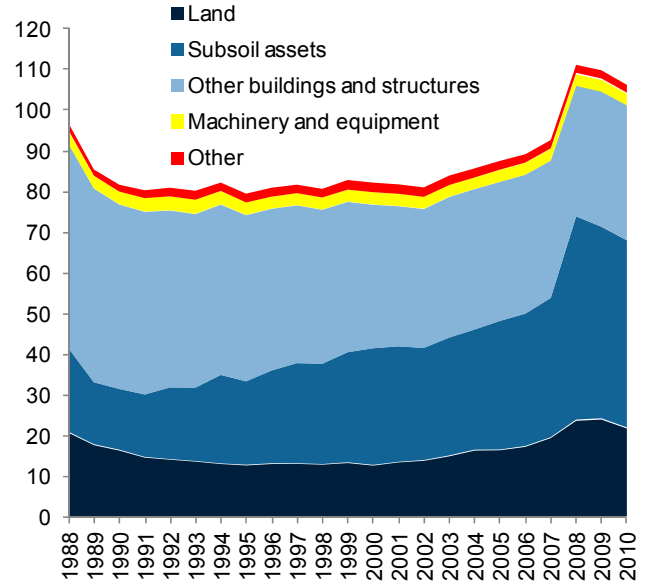
**Australia has one of the highest levels of nonfinancial assets among advanced economies due to the high value of land and subsoil assets.** The composition of Australia's nonfinancial assets has changed over time, with nonproduced assets accounting for an increasing share of the total (Figure 8). With commodity and land prices on the rise, subsoil assets have tripled to about 45 percent of GDP over the past decade, while land has nearly doubled in value in the same period to about 21 percent of GDP. These two asset classes now account for nearly two-thirds of total nonfinancial assets.

**Table 3. Australia: Two Types of Datasets on Nonfinancial Assets**  
(Percent of GDP)

	GFS	OECD	Difference
<b>Total nonfinancial assets</b>	<b>69.6</b>	<b>109.3</b>	<b>-39.7</b>
Total produced assets	46.9	40.6	6.2
Fixed assets	44.7	40.6	4.2
Buildings and structures	41.8	33.9	8.0
Other	2.9	4.9	-2.0
Inventories	0.6	0.1	0.5
Valuables	1.6	0.0	1.6
Total nonproduced assets	22.7	68.6	-45.9
Land	22.3	21.9	0.4
Subsoil assets	0.0	46.0	-46.0
Other	0.4	0.7	-0.3

Source: Australian Bureau of Statistics.

**Figure 8. Australia: Components of Nonfinancial Assets**  
(Percent of GDP)



Source: OECD, and Australian Bureau of Statistics.

**Australia has not made divestment of nonfinancial assets part of its recent fiscal strategy.** However, as recently as January 2013, interested parties in Australia, including Infrastructure Australia, the federal government entity that manages public-private partnerships, have suggested that central and state governments may need to consider



divesting some infrastructure assets, such as roads and railways, to fund the construction of others.<sup>12</sup>

## B. Canada

**While long time series of nonfinancial asset data are available, a remaining gap is the valuation of Canada's subsoil assets.** Data are available as early as 1970, and valuations are based on a perpetual inventory model. As part of the implementation of the 2008 *SNA* methodology, Canada changed its system of calculating the consumption of fixed capital (depreciation), refined its techniques for valuing dwellings and land, and added estimates for research and development, and weapons systems. These items combined caused a downward revision of its general government nonfinancial asset levels by approximately two percent of GDP. A key omission is the reporting of subsoil assets as part of the general government's balance sheet. As part of its environmental accounts, Statistics Canada has developed an estimate for subsoil assets for the economy as a whole, and currently puts the value at about 70 percent of GDP.<sup>13</sup> This estimate is neither included in the calculation of reported national net worth nor is it currently sectorized or included in the general government sector of the national balance sheet.

**Canada's reported nonfinancial assets for the general government are relatively low due to the failure to report subsoil assets** (Figure 9). At about 45 percent of GDP, they are below the cross-country average, consist mostly of buildings (other than dwellings) and structures, and are owned largely by state and local governments (Figure 10). The central government's share of general government nonfinancial assets has steadily dropped from a peak of around 15 percent in the mid-1990s to currently less than 9 percent of total. The value of land is reported at 10 percent of GDP, only about one-half of that reported by Australia, and has remained stable over time.

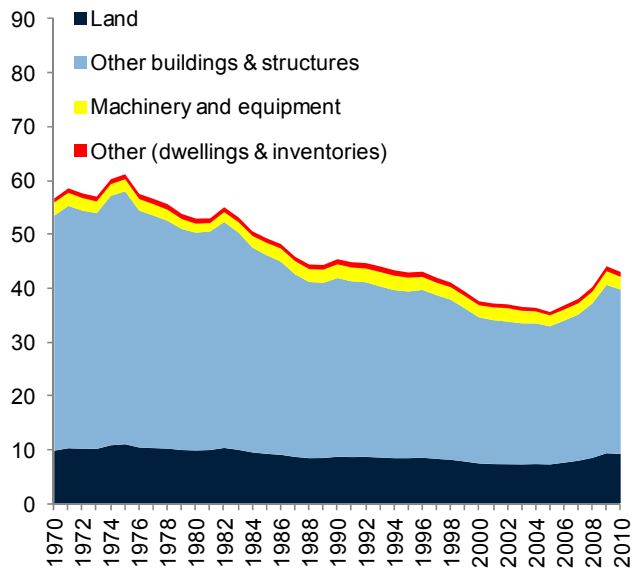
**Privatization was part of the deficit reduction strategy in the late 1980s/early 1990s, but disposition of nonfinancial assets has not played an important role.** Three large public corporations were sold (Air Canada, Petro Canada, and the Canadian National Railway) but unlike in the United Kingdom where companies also held large numbers of dwellings for employees, these sales only affected the general government's financial assets. While no major portions of nonfinancial assets were sold, the use of new nonfinancial assets, in particular buildings, has been increasingly through leases rather than own construction or purchases.

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<sup>12</sup> *Herald Sun*, January 15, 2013.

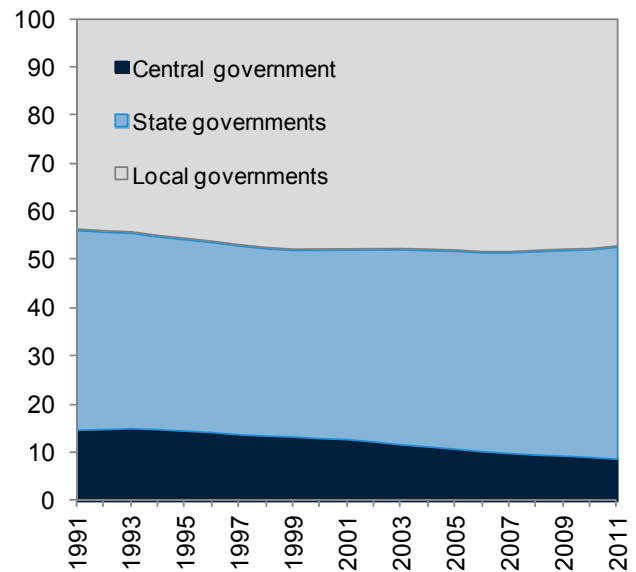
<sup>13</sup> Statistics Canada, CANSIM table 378-0005.

**Figure 9. Canada: Components of Nonfinancial Assets**  
(Percent of GDP)



Source: OECD.

**Figure 10. Canada: Role of Subnational Governments**  
(Percent of total)



Source: IMF Government Finance Statistics Database.

### C. France

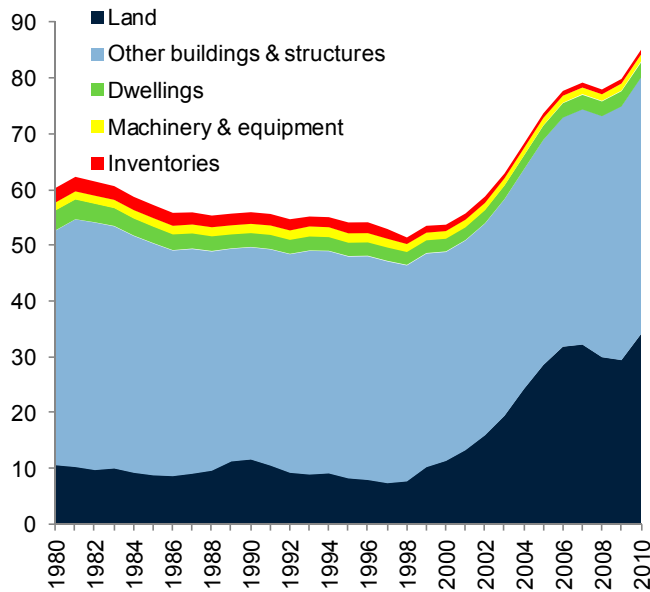
**France has one of the most advanced and comprehensive reporting systems for nonfinancial assets.** Nonfinancial assets series date back to 1978 with most subcategories reported and changes distinguished into valuation and volume effects. The country is also one of the few to account for nontangible fixed assets, like entertainment, literary and artistic originals (valued at 0.01 percent of GDP), in compliance with the *2008 SNA*. Most fixed assets are valued at market prices, or estimated through an actualization method that uses coefficients for price changes, and for changes in the physical condition of the asset. A few other assets are simply estimated considering construction costs and depreciation.<sup>14</sup>

**Nonfinancial assets include mostly nonresidential buildings and land, and they largely belong to local governments.** After a slight downward trend throughout the 1980s and most of the 1990s, the total stock of nonfinancial assets increased by about 20 percentage points to 85 percent of GDP by 2010 (Figure 11). These developments predominantly reflect changes in the value of land underlying buildings, which now makes up about one-third of total assets—a higher share than in most other countries. Buildings in France are valued at

<sup>14</sup> However, some assets that are hard to value, are not included in the balance sheet accounts, such as national monuments and artworks held by national museums.

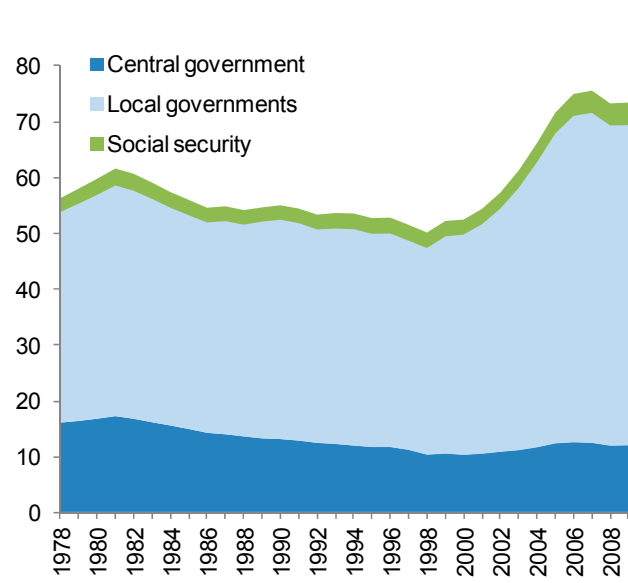
construction costs, while land is estimated at market prices (Figure 12). Despite the increase in land share, nonresidential buildings (offices of the public administration or public works, like roads, hospitals) remain the bulk (about two-thirds) of nonfinancial assets. Local governments account for three-quarters of the nonfinancial assets ownership. Specifically, with the decentralization reform of 1982, the property of some buildings and land has shifted from the central government to local governments (Figure 13).

**Figure 11. France: Trends in Nonfinancial Assets, 1978–2010**  
(Percent of GDP)



Sources: OECD, and INSEE.

**Figure 12. France: The Role of Subnational Governments**  
(Percent of GDP)



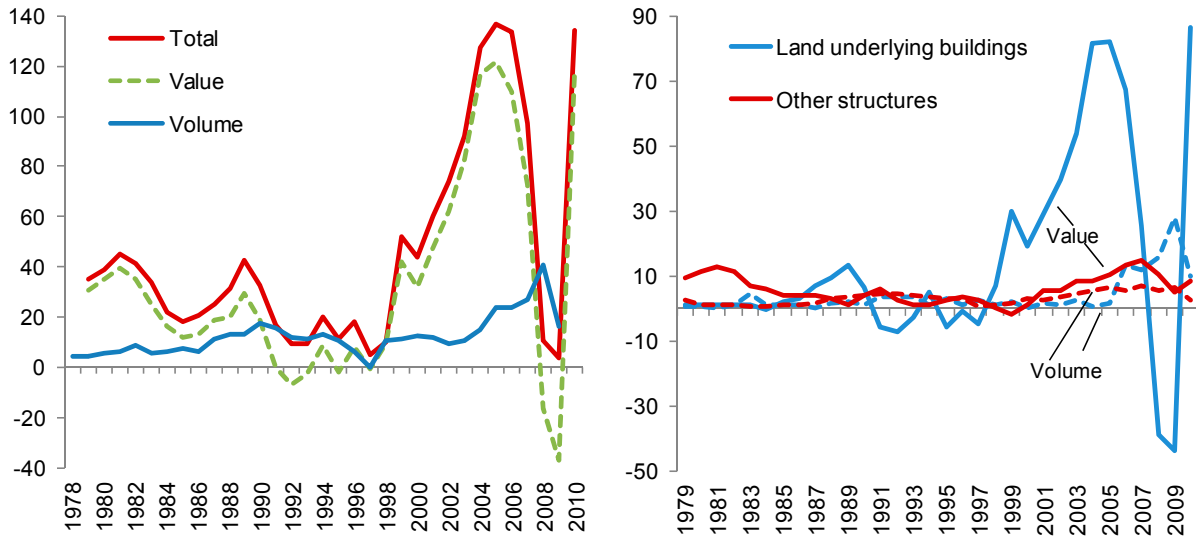
Sources: OECD, and INSEE.

**In 2006, the government launched an initiative to rationalize and reorganize government properties, but revenues have been small.** The objective of the reform is to dispose of those buildings (*parcs immobiliers*) that are deemed no longer adequate to the needs of the public administration. Since 2006, 3 percent of the total offices of the public administration were sold, yielding receipts of more than EUR3.5 billion, corresponding to 0.2 percent of GDP (Table 4). The budget law of 2006 required that 15 percent of the proceeds from the sales of nonfinancial assets, and from the benefits resulting from the use of these assets should contribute to the reduction of public debt.<sup>15</sup> In the 2010 budget, the share was increased to

<sup>15</sup> Exceptions to this law apply to sales of properties of the Ministry of Defense and of buildings held abroad (about 7½ percent of the government's total real estate, accounting for the largest sales of government nonfinancial assets in 2011). Such exceptions also include the sales, occurring up till 2014, of buildings used for scientific and cultural activities or for teaching purposes, as well as buildings belonging to the aeronautics.

20 percent in 2012, 25 percent in 2013, and 30 percent in 2014. In practice, however, the bulk of the receipts have been used for the relocation of offices and personnel, and the amount used for debt reduction has been insignificant so far.

**Figure 13. France: Valuation and Volume Effects of Changes in Nonfinancial Assets**  
(Year-over-year percent change)



Sources: OECD, and INSEE.

Sources: OECD, and INSEE.

Note: Dashed lines show volume changes, other lines show value changes.

**Table 4. France: Receipts from Sales of Nonfinancial Assets<sup>1</sup>**  
(Millions of euros unless otherwise indicated)

	2006	2007	2008	2009	2010	2011	2006-11
Receipts from NFA sales	796.7	837.4	401.5	475.0	504.6	597.7	3612.9
Amount for debt reduction	120.8	131.7	61.8	22.8	50.5	62.5	450.1
Percent of GDP	0.044	0.044	0.021	0.025	0.026	0.030	0.191
Percent of receipts from NFA	15.2	15.7	15.4	4.8	10.0	10.5	12.5

Source: INSEE.

<sup>1</sup> This includes also securitization receipts.

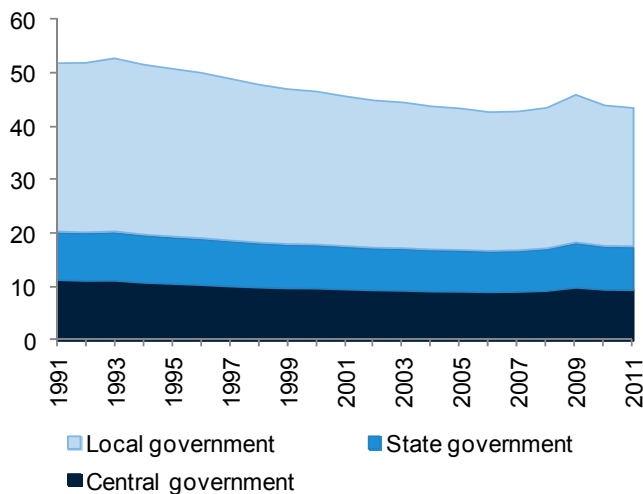
## D. Germany

**Detailed data are available for fixed assets, but there are no data for nonproduced assets.** As part of its national accounts, the Statistical Office reports fixed assets (gross and net) since 1991 with a breakdown into government sub-sectors and types of fixed assets. Accounting practices follow *ESA95* using the perpetual inventory method. Moreover, all government levels have recently been mandated to produce primary statistics on their nonfinancial assets with a view to reporting a complete balance sheet. However, progress is

slow and evaluation guidelines differ across government units, which would complicate the task of creating a comprehensive balance sheet from the collected primary data. Thus, the balance sheet annually reported by the federal government covers only its financial assets. As for nonfinancial fixed assets, it reports their volume, but not their value.<sup>16</sup>

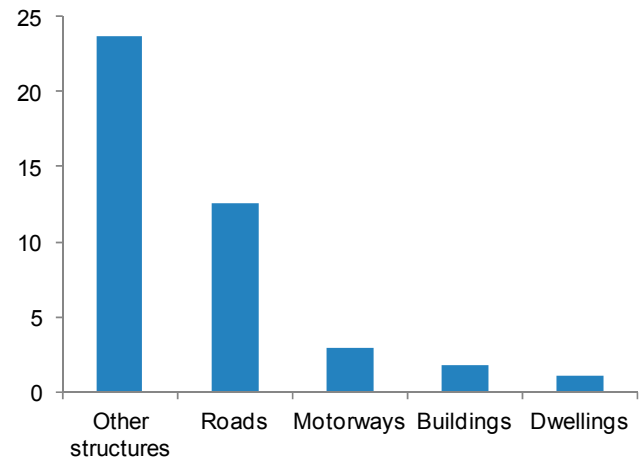
**German general government fixed assets have trended downwards to currently 43½ percent of GDP** (Figure 14). In real terms, fixed assets have remained broadly flat over the past two decades (annual increase of about 0.3 percent on average), which has reduced the ratio in percent of GDP. This development in Germany stands in contrast to that of other advanced economies, such as France, Japan, and the United States, where an increase from the early 2000s in the fixed-assets-to-GDP ratio was driven by property price increases until the 2008/09 economic and financial crisis. As a result, fixed assets in Germany are lower than in the average advanced economy.

**Figure 14. Germany: Fixed Assets by Government Sector**  
(Percent of GDP)



Sources: Federal Statistical Office, and *IMF World Economic Outlook*.

**Figure 15. Germany: Components of General Government Fixed Assets**  
(Percent of GDP)



Sources: Federal Statistical Office, and *IMF World Economic Outlook*.

**Local governments hold the largest share of fixed assets, mostly as buildings and structures.** At around 60 percent, the local authorities' share in the ownership structure has remained broadly constant over time, with the federal government (and social security funds) accounting for 22 percent and the state governments for 18 percent (Figure 14). For all levels of government, the vast majority of fixed assets consists of structures, many of which are

<sup>16</sup> The Institute of Federal Real Estate provides an evaluation of the central government assets in its portfolio, which currently amount to about ½ percent of GDP.

roads and motorways (15½ percent of GDP, Figure 15). Buildings and dwellings, on the other hand, which are assets that are more easily marketable, account only for a small part of fixed assets (less than 3 percent of GDP). This breakdown has been relatively stable over the past two decades.

**Given the structure of its fixed assets, forms other than asset disposal could potentially play a role in debt reduction.** Managing nonfinancial assets efficiently and effectively, while also raising the transparency of its stock and flows, is a strategy currently pursued at all government levels. For the federal government this is, for example, reflected in the role of the Institute of Federal Real Estate, which was created in 2005 to succeed the Federal Property Administration and which provides property management services (for real estate, land, forests, and waterways) under one roof. Disposal of assets, where it leads to economic benefits, is part of the strategy. However, since most assets are in structures (including roads and motorways) other than buildings and dwellings, significant yields could rather be expected from collecting user charges, including through public-private-partnerships. The road toll for trucks, for example, introduced in Germany in 2005, yields annual revenues of about 0.2 percent of GDP (2011) to the federal government.

### E. Italy

**The reporting of nonfinancial assets is outdated and does not comply with international standards, but a new data collection exercise is underway.** Italy provides information only on dwellings to the OECD database, and no data to the GFS. However, additional information is available at the national level (using different classification and valuation methods), collected by the treasury and the Agency for State Properties (*Agenzia del demanio*). The latest official data available on general government are those of the 2004 property census, with estimates for 2001–03, and are broken down by central and local governments, as well as the social security agencies. Moreover, the Agency for State Properties publishes the real estate account for the central government annually.<sup>17</sup> To address these gaps, and as part of its debt management and reduction strategy, Italy has recently launched a new census. It aims at collecting information on property units and land for all levels of government. Preliminary estimates, though incomplete, are available for 2011.

**Italy's main nonfinancial assets include the central government's infrastructure and natural resources, as well as local administrations' buildings.** Estimates from the 2004 property census put nonfinancial assets at 78 percent of GDP with about 33 percent of GDP owned by local governments (Table 5). Of the total, 55 percent is composed of infrastructure, largely owned by the central government, and 14 percent of natural resources, while

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<sup>17</sup> This excludes properties managed by the ministry of defense and some small agencies (*monopoli di stato* and *the agenzia del demanio d'oltremare*).

11 percent consists of local government buildings. Unlike the *ESA95* classification, here, the notation of natural resources encompasses a much broader range of items. In addition to reserves of gas and oil, it includes hydric resources (rivers, lakes, streams, glaciers, and ports), maritime properties (coastlines, lagoons, river deltas), forests, natural parks, air and atmosphere, biodiversity and landscape. In addition, the census reports data on TV frequencies and historical heritage assets (about 2 percent of total assets), the frequencies being valued by considering the license fees that TV companies pay to the state.

**Earlier estimates indicate that the equivalent of almost four percent of GDP in nonfinancial assets could be sold.** The census distinguished between assets that can be sold, or easily disposed of, from those that cannot. Unsaleable assets were defined as all those belonging to the ministry of defense, natural resources, infrastructure, TV frequencies,<sup>18</sup> and historical heritage buildings. Dwellings and all commercial buildings belong to the group of disposable assets, together with 70 percent of buildings under government use, 30 percent of cultural buildings, and 30 percent of machinery and equipment. In 2003, the number of disposable assets amounted to 8½ percent of the total central government assets or 3¾ percent of GDP (Table 5).

**Table 5. Italy: Nonfinancial Assets and Disposable Assets.**  
**Estimates from the 2004 Property Census**  
 (Percent of GDP)

	Central government	Local governments	Social security agencies	Central government	Disposable share	(Percent of GDP)
Intangible fixed assets	1.6	4.7	0.0	...	...	...
Rights of mining exploitation	0.0	...	...	<i>disposable</i>	100%	0.0
R&D	1.5	...	...	<i>disposable</i>	10%	0.1
Other	0.1	...	...	<i>disposable</i>	50%	0.1
Tangible fixed assets	42.8	29.1	0.5	...	...	...
Land	0.4	2.6	...	<i>disposable</i>	80%	0.4
Natural resources	10.8	1.8	...	<i>nondisposable</i>	0%	0.0
Dwellings	0.4	4.9	...	<i>disposable</i>	100%	0.4
Other buildings	2.9	4.1	...	<i>disposable</i>	75%	2.2
Military equipment	1.7	...	...	<i>nondisposable</i>	0%	0.0
Infrastructure	21.3	13.4	...	<i>nondisposable</i>	0%	0.0
TV frequencies	1.3	...	...	<i>nondisposable</i>	0%	0.0
Historical heritage	1.8	...	...	<i>nondisposable</i>	0%	0.0
Cultural items, library, and archive:	0.9	...	...	<i>disposable</i>	30%	0.3
Machinery and equipment	1.2	...	...	<i>disposable</i>	30%	0.4
Other	...	2.2	...	...	...	...
<b>Total</b>	<b>44.3</b>	<b>33.8</b>	<b>0.5</b>	<b>Total disposable</b>		<b>3.8</b>

Source: Conto del patrimonio, 2004.

<sup>18</sup> Licenses of frequencies are considered saleable.

**New preliminary data from the current census estimate the value of property and land at 35 percent, of GDP of which 3¼ percent of GDP could be sold.** In March 2011, the ministry of finance published the results from the latest survey covering just over one-half of the total public administration thus far. Extending the estimates to the full set, and accounting for the recent reduction in property prices, a study by IntesaSanPaolo (2012)<sup>19</sup> estimates total properties at about 30 percent of GDP and land at about 5 percent of GDP. Nearly three-quarters of the properties are used for public administration activities, 10 percent are dwellings, and for 18 percent the use is unspecified. Applying the same methodology used in 2004 to assess the amount of disposable (saleable) assets, the study calculates these at around 3¼ percent of GDP (EUR50 billion), accounting only for unoccupied buildings. Including other saleable nonfinancial assets could raise the number somewhat higher than it was at the time of the 2004 census.

**A new regulation sets out the modalities for using the receipts from asset sales for debt reduction.** The Berlusconi government announced the intention to sell public assets (mostly buildings) of around EUR5 billion per year for the period 2012–14 and use the funds for debt reduction. This policy was not enacted by the new government, but instead, the November 2011 law regulated the management and sales of state properties through a new agency (*Societa' di Gestione del Risparmio, SGR*) with a view to reducing public debt.<sup>20</sup> Among the measures currently discussed are the sales of management rights on natural resources, on some infrastructure and TV licenses, the sale of CO<sub>2</sub> emission rights, the sale of government shares in private companies, and the sale of tax credits (IntesaSanPaolo, 2012). The receipts from the sales of buildings are to be transferred to the fund for the amortization of public debt, while the receipts from the sales of buildings that are not occupied will be used to buy state bonds, and the interests would be used to pay for rent and management charges. The establishment of the SGR is still in process.

## F. Japan

**Data reported for Japan provide a rather comprehensive picture of the level and composition of nonfinancial assets, in particular for the central government.** In line with the *SNA*, data on general government nonfinancial assets are available from 2001, covering produced assets as well as land, the main component of nonproduced assets. Moreover, national sources provide details on different items of central government properties (*national property*), but not much information is available on local governments. As part of the

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<sup>19</sup> Mamei, 2012.

<sup>20</sup> Art 6, law 183, November 2011 addresses the use of government properties for debt reduction; Art. 33 and 33bis, of Decree law n.98, 6 July 2011, establishes the new Agency for the Management of Public Savings (SGR).



“Administrative Reform for the Promotion of an Efficient Government,” the authorities are improving the tracking, recording and dissemination system of nonfinancial assets.

**Japan has one of the highest levels of nonfinancial assets among the advanced G-20 economies.** Total nonfinancial assets in 2010 amounted to 120 percent of GDP and have trended upwards by about 15 percentage points of GDP until the start of Great Recession (Figure 16). Information from the revaluation accounts show that while in the early 2000s some of the variation is caused by changes in volume, from 2006 onward it is mostly due to price fluctuations (Figure 17).<sup>21</sup> Two aspects are remarkable in Japan’s composition of assets. First, while land accounts for one-fifth of total nonfinancial assets, the share in total assets is on the low side compared to other countries reporting the value of land (see Appendix Table 1). However, it is broadly in line with that of other densely populated economies (e.g., the Netherlands). Second, at 7½ percent of GDP holdings of nonresidential buildings are relatively high compared to other countries. Overall, and in line with other economies, the bulk of the assets (70 percent of total) lies in structures and buildings. Almost 70 percent of nonfinancial assets are owned by local governments.

**IMF staff estimates put potential saleable nonfinancial assets of the central government at up to 7 percent of GDP over the long term.** One-third of the total nonfinancial assets is owned by the central government. While about 30 percent of GDP of these assets cannot be sold, estimates conducted by IMF staff, based on data by the Japanese Cabinet Office, indicate that up to 7 percent of GDP could potentially be disposed of in a long-run horizon. This refers to the nonfinancial assets that are under the direct control of the Ministry of Finance. In practice and in the short term however, selling these assets could prove difficult, since they include, for example, military facilities and land used by the United States (3 percent of GDP), airports, and national parks.<sup>22</sup>

**A reform to strengthen the management and recording of nonfinancial properties is ongoing.** In 2006, as part of the Administrative Reform for the Promotion of an Efficient Government (Act n. 47 2006, art. 58), the government launched a strategy for the use of assets and liabilities, and the sales of government properties that are not publicly used.

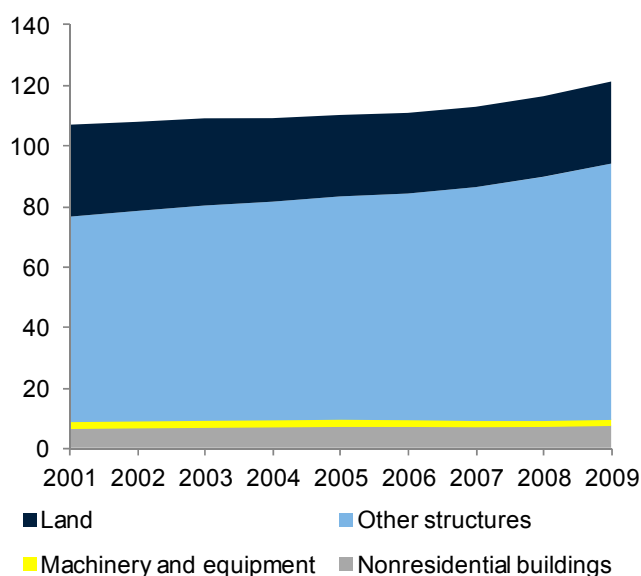
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<sup>21</sup> In the revaluation account, price changes are distinguished between changes in overall inflation (“neutral holding gains and losses”) and changes specific to prices of land, fixed assets and inventories (“real holding gains and losses”). The bulk of the increase in prices comes from variations specific to fixed assets and land, in a way that reflects international properties prices, with a peak in 2007 and a dip from 2008 to 2009.

<sup>22</sup> Of the so-called national property, which is in the hands of the central government and amounts to about 38 percent of GDP, more than one-half is used by the public administration, and consists mostly of land. One-quarter consists of national corporate properties (i.e., provided to government enterprises or used as housing for workers of the enterprises). The rest is made up of mostly military camps, airfields, port facilities for the U.S. Armed Forces, and land leased to local governments as parks.

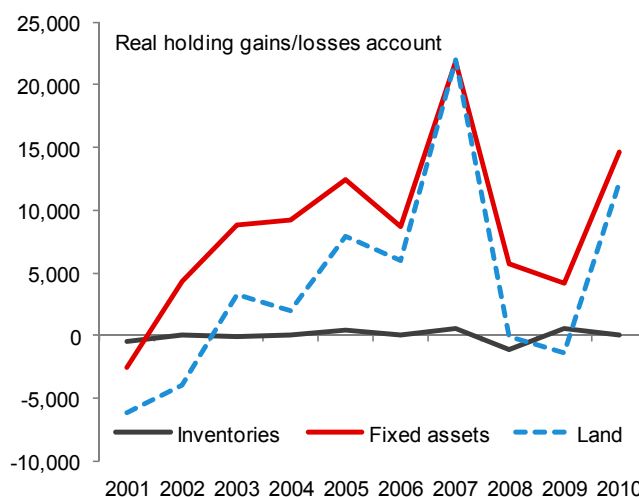
Subsequently, the plan has been revised and become one of the policy goals of the country's new growth strategy adopted by the Cabinet Meeting on June 18, 2010 (Ministry of Finance Japan, 2011). The main elements of this reform consist of (i) improving the use of national land, government buildings and housing facilities, through a review of the management disposal policy; (ii) enhancing cooperation with local governments; (iii) strengthening audits; and (iv) improving information and data dissemination systems. Loans, leasing, and sell-offs are the measures considered for the disposal of national property. Emphasis was initially on the sales of dwellings and unused land, but for those properties or land that have proven difficult to sell, the government has promoted loans and fixed-term leases of land to local governments or other entities that will engage in improving the facilities and land. Land leased to local governments amounts to about ¥2,000 billion (about ½ percent of GDP). Furthermore, to respond to the 2011 earthquake and tsunami, unused land was lent to local governments at no charge.

**Figure 16. Japan: Trends in Major Components of Nonfinancial Assets**  
(Percent of GDP)



Source: Ministry of Finance Japan, and OECD.

**Figure 17. Japan: Changes in Nonfinancial Assets from Valuation Effects**  
(Billions of Yen)



Source: Ministry of Finance Japan.

## G. Korea<sup>23</sup>

**Korea has been compiling relatively comprehensive data on government nonfinancial assets since 1968 in line with *SNA* and the *OECD Capital Stock Measurement Manual*.** While the OECD database includes only total nonfinancial assets, Statistics Korea publishes

<sup>23</sup> Prepared by Kim Yoon.

national wealth statistics that include general government nonfinancial assets annually.<sup>24, 25</sup> The data cover almost all sub-categories of nonfinancial assets except for valuables, water resources, and nontangible, nonproduced assets. Valuations of the assets are based on various methods reflecting the different characteristics of each asset.<sup>26</sup> The ministry of finance also collects detailed data on government property owned by central and local governments, but these differ in coverage and valuation methods from the *National Wealth Statistics*.

**Korea reports the highest level of nonfinancial assets of all advanced G-20 economies, including a large share of land.** The total stock of nonfinancial assets amounted to 126 percent of GDP in 2011, an increase of about 26 percentage points since the early 2000s. The increase can be broadly equally distributed to an increase in the value of land and tangible fixed assets after having recovered from the asset price collapse during the 1997/98 financial crisis. Land and tangible fixed assets account for 95 percent of total government assets (Figure 18). Ministry of finance data show that in 2011, two-thirds of government property was in the hands of the central government (Figure 19). This is up from around one-half in earlier years, and can be explained by an extension of the coverage in 2011 to include other structures and buildings (roads, railroads, dams, airports, seaports, etc.) as well as valuation changes.

**With its economic development, the focus of the government's property strategy has shifted from asset disposal to the preservation of their value and efficient management.** Until the mid-1970s, the disposal of government properties was considered an easy way to meet financial needs. Once the reliance moved toward tax mobilization, facilitated by strong growth in the 1970s and 1980s, the policy focus shifted toward better asset management. To that purpose, several reforms were launched. These include the creation of the National Property Management Special Account in 1994, and the introduction of a development trust system. In 2011, a large scale reform of the government property management occurred, establishing the Government Property Management Fund, while introducing a Comprehensive Government Property Management Plan.<sup>27</sup> The objective of the reform has been to make better use of government properties, and increase their values.

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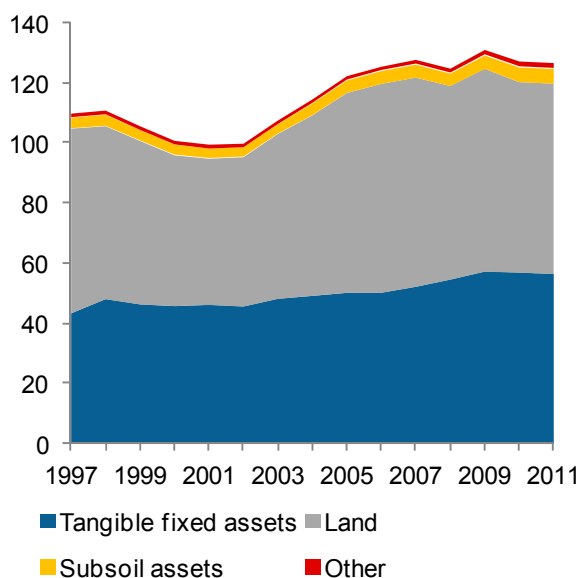
<sup>24</sup> In 2007, Statistics Korea changed the methodology of compiling statistics from a decennial survey to annual estimation.

<sup>25</sup> The *National Wealth Statistics* provides a breakdown by institutional sectors that consist of financial and nonfinancial corporations, general government, and individuals.

<sup>26</sup> For example, the benchmark year method is employed for tangible fixed assets and inventories; the perpetual inventory model for nontangible fixed assets; and the quantity price method for land and noncultivated biological resources.

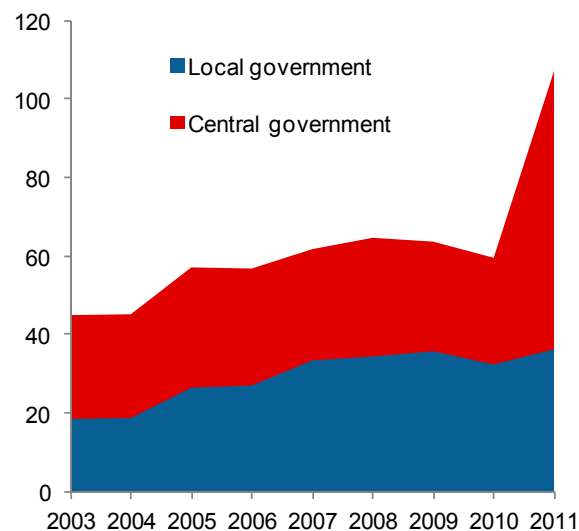
<sup>27</sup> The annual plans include mid- to long-term policy direction and criteria for property disposal.

**Figure 18. Korea: Trends in Major Components of Nonfinancial Assets**  
(Percent of GDP)



Sources: Statistics Korea, *National Wealth Statistics* 2012.

**Figure 19. Korea: Nonfinancial Assets by Government Sector**  
(Percent of GDP)



Sources: Ministry of Finance Korea, and Ministry of Public Affairs, Korea.

**Financing the budget deficit or reducing government debt, has not been a primary reason for the disposal of government property in recent years.** Sales of government properties amounted to about 0.8 percent of GDP cumulative from 2004–11. The proceeds, as well as leasing charges and indemnities, have been transferred to the Property Management Fund, and reserved for the future management of government properties, including the acquisition of government complexes and residences, land reserves, and development projects of government properties.

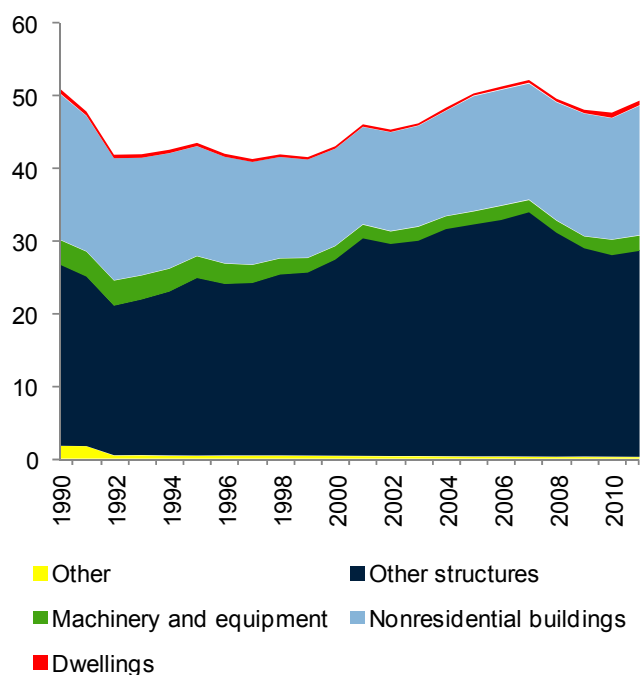
## H. United Kingdom

**U.K. nonfinancial assets data are detailed, but cover only produced assets.** OECD data for most series start in 1990; this is complemented by detailed national source data (Office of National Statistics), starting from 1987, using an alternative classification and providing a breakdown into levels of government, including public nonfinancial corporations. All series cover only produced assets. Moreover, the Whole of Government Accounts, first published in November 2011 for 2009-10, provide a full picture of public sector nonfinancial assets,

including the Bank of England, based on International Financial Reporting Standards (IFRS).<sup>28</sup>

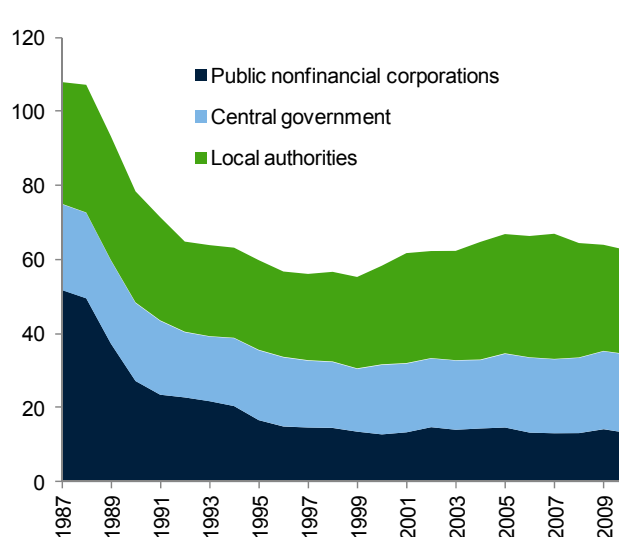
**The composition of nonfinancial assets is similar to other advanced economies, though the level is at the lower end.** In 2011, the general government reported nonfinancial assets of about 50 percent of GDP, below the average of advanced economies. Buildings and structures (mostly infrastructure), more than one-half of which were owned by local governments, account for the bulk of assets (Figure 20). Public nonfinancial corporations reported another 13 percent of GDP, about one-half consisting of residential buildings.<sup>29</sup> The value of land for the public sector is estimated at about 3 percent of GDP (Whole of Government Accounts, 2012).

**Figure 20. United Kingdom: Components of Nonfinancial Assets, General Government**  
(Percent of GDP)



Source: OECD.

**Figure 21. United Kingdom: Holdings by Level of Government of the Public Sector**  
(Percent of GDP)



Source: Office of National Statistics, United Kingdom.

<sup>28</sup> See for Whole of Government Accounts: [http://www.hm-treasury.gov.uk/psr\\_government\\_accounts.htm](http://www.hm-treasury.gov.uk/psr_government_accounts.htm)

<sup>29</sup> These include the properties of those corporations whose general corporate policy is subject to control by general government. They include the BBC, the Civil Aviation Authority, the Post Office, and British Nuclear Fuels Limited. They also include governmental trading bodies such as the Central Office of Information, Companies House, Land Registry, local government housing revenue accounts, and Export Credits Guarantees Department.

**Changes in the stock of U.K. nonfinancial assets have been largely associated with the 1980s and 1990s privatization and the property boom.** Long-term trends in U.K. nonfinancial assets reflect waves of privatization and to some degree asset price booms and busts. Historical data (though using a different methodology) indicate that nonfinancial assets declined from 1948–73, following the dismantling of military buildings after World War II. The decline was only partially compensated for by increases in nonmilitary buildings and roads (Office of National Statistics, 2011). With the start of the privatization process in the early 1980s, the amount of government-owned dwellings declined substantially until the mid-2000s, as many dwellings were sold in conjunction with public corporations. Privatization also induced a reduction in plant, machinery, and transport equipment until the mid-1990s (by about 1½ percent of GDP). Also, starting in 1992, the government increased its sales of land underlying buildings. From the early 2000s until the Great Recession, nonfinancial assets expanded again. While the data allow for gaining a broad picture on long-term trends, interpretation—especially of short-term changes—requires caution, given several structural breaks resulting from methodological changes.<sup>30</sup>

**Further steps have been taken to improve information gathering and public asset management.** The government has followed a strategy for better use of nonfinancial assets in support of the overall deficit reduction, as laid out in the 2010 *Spending Review*. Part of this has been the creation of the Government Property Unit in charge of property management in the public sector, and has been preparing a new central database for all departments and local governments. Disposal of nonfinancial assets continues to be decided and undertaken at the department level after negotiations with the treasury. After the significant asset sales in the 1980s and 1990s, the scope for further sales has been much more limited. However, recently the auction of the 800 MHz and 2.6 GHz spectrum in February 2013 yielded new receipts of about £2.3 billion (0.15 percent of GDP).<sup>31</sup>

## I. United States

**The United States has one of the longest available time series, though not including the value of nonproduced assets.** Data reported to the OECD start in 1970, and cover only tangible fixed assets (dwellings, other buildings, machinery and equipment). National data coverage (Bureau of Economic Analysis) is broader: it starts as early as 1960, covers inventories and structures more comprehensively, and provides a breakdown by government level. As a result, the BEA's data put general government nonfinancial assets at about

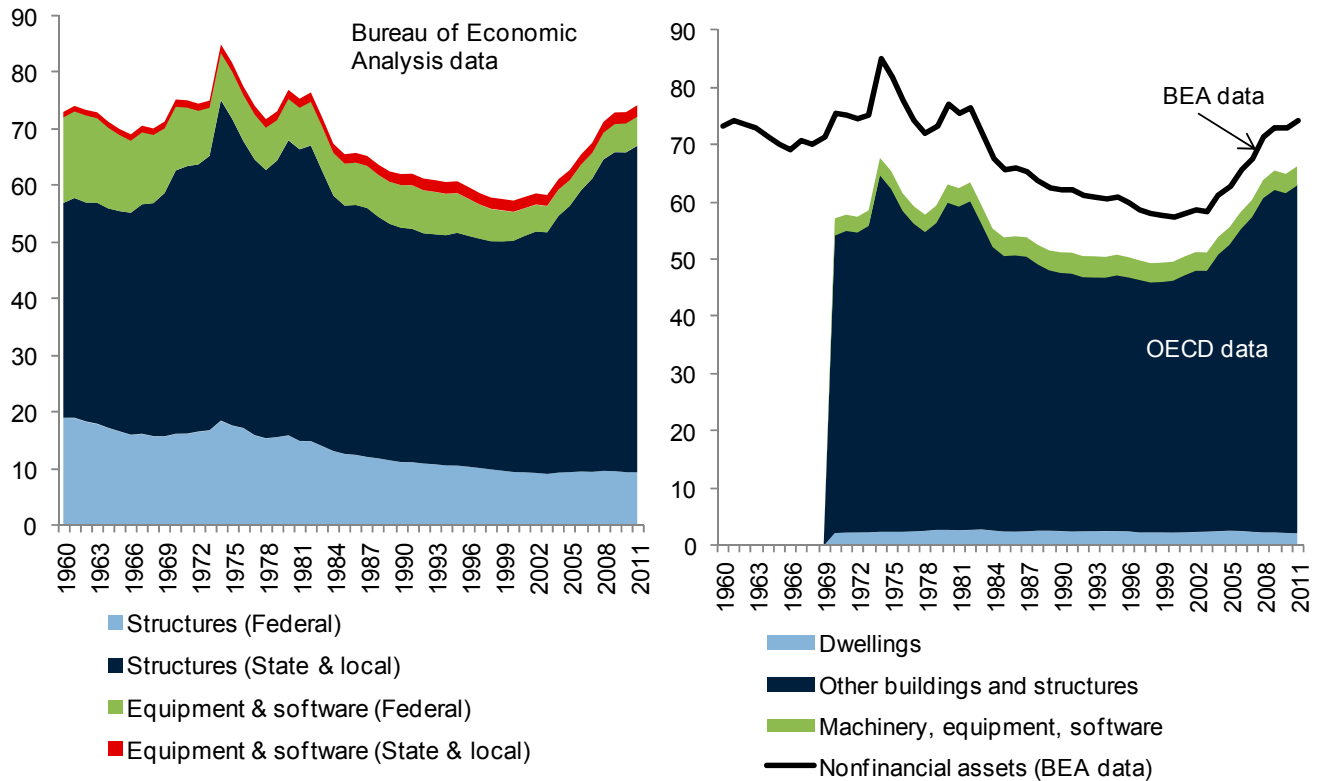
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<sup>30</sup> For instance, the 2010 increase in nonfinancial assets is mostly associated with the implementation of the International Finance Reporting Standards (IFRS), which resulted in an upward revision of the valuation of some tangible assets, such as (CIO) buildings, civil engineering, plants and machinery.

<sup>31</sup> See <http://media.ofcom.org.uk/2013/02/20/ofcom-announces-winners-of-the-4g-mobile-auction/>.

8–8½ percentage points above the OECD’s data (Figure 22, right panel), though the difference has trended down from more than 18 percent of GDP in 1970.<sup>32</sup> Additionally, more detailed data are reported by the Office of Management and Budget (OMB) for the federal government, and include a breakdown into assets owned by the U.S. Department of Defense.<sup>33</sup> However, the OMB classification differs from that of the EBA.

**Figure 22. United States: Components of Nonfinancial Assets**  
(Percent of GDP)



Source: Bureau of Economic Analysis.

Sources: OECD, and Bureau of Economic Analysis.

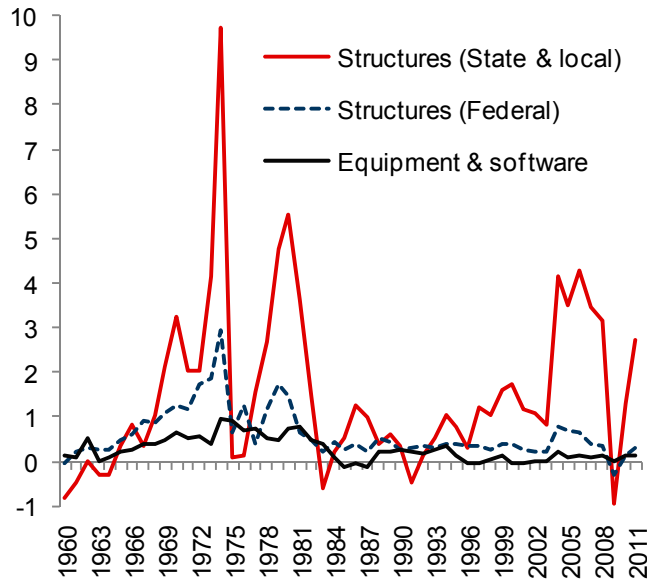
**Reported nonfinancial assets are relatively high although held back by the relatively low amounts of federal government investment in the public infrastructure.** At about 74 percent of GDP (BEA data), nonfinancial assets are valued close to earlier peak levels in the 1980s (Figure 21). After a long and gradual drop, when measured in percent of GDP,

<sup>32</sup> The difference between the OECD’s and BEA’s data generally is split equally between the two categories that are defined more broadly in the BEA’s data (inventories and structures).

<sup>33</sup> Stewardship land and heritage assets are not valued. The former is only measured in nonfinancial units (acres) and accounts for 28 percent of U.S. landmass (*2011 Financial Report of the United States Government*, Note 27). It is land that the government does not expect to use to meet its obligations. Like stewardship land, the value of heritage assets is not determined.

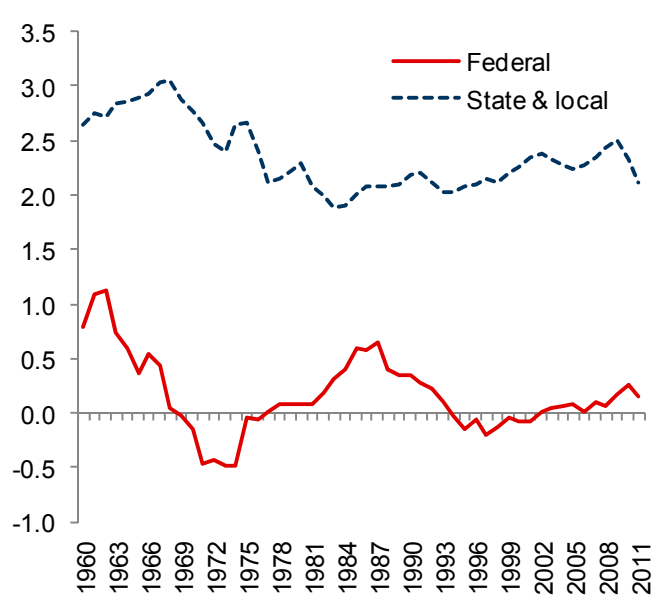
nonfinancial assets increased in line with the housing price boom starting in the early 2000s. Data from the revaluation accounts indicate that these price increases were reflected predominantly in buildings and structures owned by the state and local governments (Figure 23). In contrast, the ratio of structures to GDP by the federal government has continuously declined since the mid-1970s largely due to long episodes of very low or negative net capital formation from the federal government (Figure 24). This was only reversed under the stimulus program. As a result, state and local governments now account for 80 percent of general government nonfinancial assets, up from about 50 percent in 1960.

**Figure 23. United States: Revaluation Changes of Nonfinancial Assets**  
(Percent of GDP)



Source: Bureau of Economic Analysis.

**Figure 24. United States: Net Capital Formation**  
(Percent of GDP)



Source: Bureau of Economic Analysis.

**A large share of federal government nonfinancial assets is used for defense purposes.**

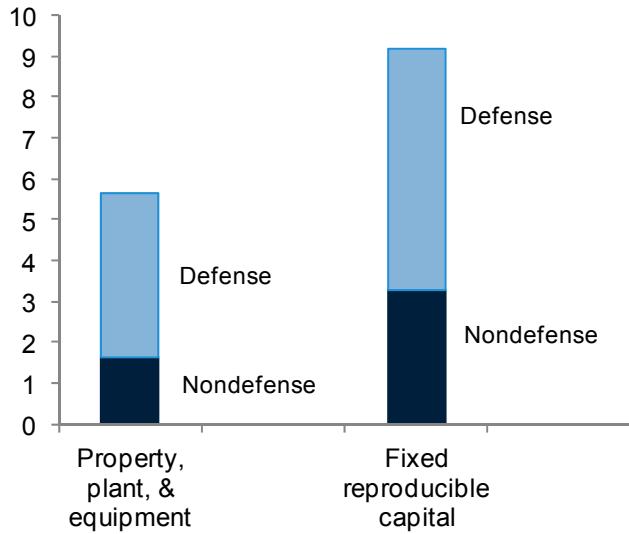
Data from the Office of Management and Budget, though using different classifications than the BEA, put the share of “fixed reproducible capital” held by the Department of Defense at 64 percent of GDP of total fixed reproducible capital (Figure 25). The role of defense also explains the relatively high level of “equipment” in U.S. nonfinancial assets compared to other advanced economies.

**Raising the efficiency of property is a strategy pursued by the federal government as well as state and local governments.** Disposal of nonfinancial assets has been limited to about ½ percent of GDP, cumulative over the past two decades at the federal level (e.g., sale of electromagnetic spectrum rights and leasing of offshore drilling rights). Increases in nonproduced assets by state and local governments reflect net purchases of land and access rights for roads (Figure 26, *Integrated Macroeconomic Accounts for the United States: Draft SNA-USA*, 2005). In an effort to eliminate waste across the federal government, the president launched the “Campaign to Cut Waste” in June of 2011, and issued an executive order that



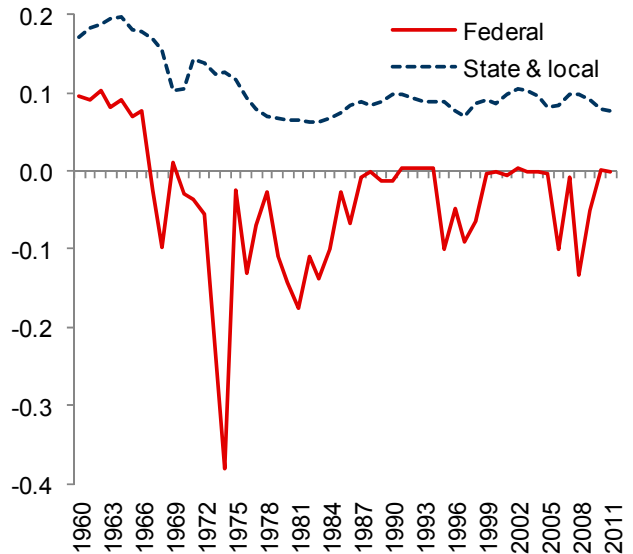
requires agencies to cut certain administrative costs in FY 2013 by not less than 20 percent below FY 2010 levels (*2011 Financial Report of the United States Government*). Moreover, the administration aims to improve the management of real property assets, including by disposing of unneeded real property, and reducing operating costs. However, in comparison to the level of the federal debt, targeted savings are very small.<sup>34</sup>

**Figure 25. United States: Nonfinancial Assets at the Department of Defense, 2011**  
(Percent of GDP)



Source: Office of Management and Budget.  
Note: Both concepts differ from the classification of nonfinancial assets used by the BEA and OECD.

**Figure 26. United States: Net acquisition of Nonproduced Assets**  
(Percent of GDP)



Source: Bureau of Economic Analysis.

<sup>34</sup> The goal was to save US\$3 billion by end-September 2012; by that time measures of US\$1.5 billion were identified.

#### IV. THE CONCEPT OF NONFINANCIAL ASSETS IN DETAIL—MEASUREMENT AND ACCOUNTING ISSUES

##### **Data on nonfinancial assets are still patchy and not easily comparable across countries.**

This is, in part, because certain measurement methodologies are resource-intensive. This section reviews the concept of nonfinancial assets from a statistical and accounting angle, and highlights some differences in the choices that various countries have made, as well as the implications for reported data.

##### A. Definition

###### **Economic assets**

**According to the 2008 SNA, an asset, financial and nonfinancial, is a store of value; only economic assets are recorded on the balance sheet.** An *asset* represents a benefit, or series of benefits, accruing to the economic owner, and is a means of carrying value forward from one accounting period to another.<sup>35</sup> *Economic assets* generate value either through use in production (e.g., an office building where employees work), or by being held over a period of time (e.g., a parcel of land held as an investment). Only those assets that provide some value to their owner are to be recorded in the balance sheet.

**That which constitutes an economic asset can change over time.** For a government to be able to recognize an economic asset on its balance sheet, there must be evidence of the government's ability to access, exert sovereign control over, and use the asset for economic benefit. Particularly for government holdings of land and subsoil assets, the circumstances that determine if they should be considered as economic assets may change. For example, as recently as the early 1990s, mineral deposits located in inaccessible, remote locations in the far northern regions of Canada, Denmark, Norway, Russia, and the United States were not considered economic assets because their location made exploitation cost prohibitive. However, with the combined effects of climate change, advances in technology, and commodity price changes, some of these resources are now considered economic assets—though, in practice, very few countries actually report subsoil assets on their balance sheets (e.g., Australia, Colombia, Netherlands).

###### **Economic owners**

**An economic asset must have, by definition, an economic owner.** An economic owner is the institutional unit that is exposed to the risks and rewards associated with the use or

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<sup>35</sup> Paragraph 10.8 of 2008 SNA

holding of an asset. It is important to note that the economic owner does not necessarily hold the legal title of the asset for which it has exposure to the economic risks and rewards. For example, if a government has leased an office building and the lease terms are such that the economically useful life of the asset will be primarily consumed by the lessee, then the government has become the economic owner of the asset, even though it is not the legal owner. As such, the office building should appear on the government's balance sheet.

### **Financial and nonfinancial assets**

#### **Economic assets can be classified as financial and nonfinancial.**

- *Financial assets* are not generally tangible and consist of items for which a financial claim exists, that is, there is a counterpart liability. The financial claim usually arises from a contractual arrangement, for example, currency and deposits, bonds, loans, or Special Drawing Rights, upon which the value of the financial asset may be based. Also, ownership of corporations (in stocks or other forms of ownership) is considered a financial asset.
- *Nonfinancial assets* are largely tangible in nature and are subdivided into two main categories: produced and nonproduced.
  - *Produced assets* are generally tangible in nature and are created or constructed as a result of the economic production process. They include fixed assets (buildings, machinery and equipment), inventories, intellectual property products, and valuables (artwork, precious metals, and jewelry).
  - *Nonproduced assets* may be tangible or nontangible and include: natural resources (oil, natural gas, and minerals); contracts, leases, and licenses; and purchased goodwill and marketing assets (trademarks).

**The line between financial and nonfinancial assets is somewhat blurry when one considers the nature of contracts, leases, and licenses.** These assets are not normally tangible in nature and result from a contractual arrangement between two parties. Thus, one could consider these assets as having aspects that are financial in nature. However, the *2008 SNA* stipulates that these assets are nonfinancial in nature, so that, for instance, a taxi license is an asset of the holder, but not a liability of the issuing government

**“Privatization” is often misperceived as a disposition of nonfinancial assets.** In fact, it is normally the disposition of a financial asset, namely, equity in a corporation. General government investment in a public corporation is recorded as “equity and investment fund shares.” Any nonfinancial assets owned by the corporation are recorded in the financial statements of the entity and corporate sector within the national accounts.

**Nonfinancial asset values need to be adjusted routinely.** Periodical changes are made to nonfinancial asset values to reflect their age, useful service lives, technological changes, and, in the case of natural resources specifically, their accessibility and amount. Consumption of fixed capital is the amount deducted periodically from the value of most nonfinancial assets as a result of its use. Consumption of fixed capital applies to all nonfinancial assets except natural resources and valuables. It is equivalent to depreciation in accounting, but may differ from it because, for example, depreciation is influenced by tax treatments rather than actual economic lives.

## B. Measurement Methods and Problems

**There are many ways to measure the value of a nonfinancial asset.** While all are largely methodologically sound, the various methodologies can result in rather dissimilar values for similar assets across countries. Three commonly used valuation methods are historical cost (typically used for accounting records), market value (typically used for buildings and land), and replacement cost (typically used for machinery and equipment).

- **Historical cost** valuation is probably the easiest to establish and maintain. Here, assets are valued based on their purchase price and only adjusted by deducting the estimate of accumulated consumption of fixed capital (i.e., the depreciation of capital). Data can be collected using surveys or an asset register, with the required data normally residing within the accounting functions of a given organization. Easy to establish and maintain, this valuation method does not, however, provide a present-day view of the balance sheet. Nonfinancial asset values can be considered misleading under this method, as changes through time, either in the nature or function of the asset, are not considered. Values become downward biased during high inflation or for long-lived assets.
- **Market value** estimations are based on the amount a willing purchaser is prepared to pay a willing seller for the asset in its current condition. The values here are often established using comparable prices for a similar asset, for example, average real estate sales prices for similarly sized buildings across a given geographical area. In estimating the market value, adjustments are assumed to include, inherently, both price changes and the reduction in value due to the productive activity for which the asset has been used (i.e., consumption of fixed capital). However, as real estate market bubbles and bursts have shown, the physical state of the asset, its location, and future income streams are not always appropriately valued at the time, and can be subject to large fluctuations. For certain nonfinancial asset types, such as land and natural resources, market value is considered to be among the best indicators. However, due to their nature, location, or attached regulations for certain assets, there may be no willing buyers. This does not mean that these assets have no value, but they might be considered heritage assets, or come under the stewardship of the government and therefore may not be sellable. Nonfinancial assets of this kind, then,

typically are not included in the government's balance sheet, or valued at one unit of local currency, or valued at historical or replacement cost even though they may create revenue (e.g., tourism receipts) and generate maintenance costs.

- **Replacement cost** estimations are based on the cost today, to construct the same asset. As with the case of market value, replacement cost estimations are assumed to include both the price and consumption of fixed capital, making their establishment and maintenance resource intensive. The replacement cost method is typically used for assets for which no liquid market exists, such as machinery and equipment. This method is less subject to market volatility than the market value method.

### C. Data Collection Procedures

**Statistical agencies acquire data, either through direct collection or via survey directed at the financial statement preparers.** The first method, financial statements or transactional financial accounting data, is a very useful source to build statistics, but also has several drawbacks. In particular, the valuation methodology underlying the financial accounting may not be the same as required for statistical purposes. The key difference is the use of concept of materiality in financial accounting. This means, that most government entities have a “capitalization” policy which delineates the terms under which an asset, including nonfinancial assets, is expensed or capitalized, regardless of the duration of its use in the production process. Traditionally, there is a monetary value assigned for which assets will and will not form part of the nonfinancial asset balance. The second method, surveys, has the advantage that it can be designed to request exactly the information that is needed to assess the value of nonfinancial assets. However, in practice, government entities (and other entities) tend to provide the data that they have readily available and tend not to recreate information based on statistical compilation and measurement requirements.

**The perpetual inventory method (PIM) is a way of generating estimates by cumulating past data on the acquisition of assets.** The value of assets at acquisition is adjusted over time to account for price changes, acquisitions and dispositions, and the consumption of fixed capital. This method thus addresses the shortcomings of accounting methods, and allows estimation from aggregates, without detailed data in individual assets. The many factors accounted for in such a calculation have made it widely accepted as the most appropriate, and most commonly used, measurement methodology, including for structures which comprise the large majority of nonfinancial assets. Establishing and maintaining this method, however, is resource intensive. Inputs on past asset acquisition and price indexes are usually already available and collected by survey or through administrative data sources. In addition, the methodology used to calculate the consumption of fixed capital, can have a significant impact on the resulting valuation. This method is often calculated at a high level of aggregation, and with limited information on the actual retirements of assets.

**National statistical offices also use different valuation methodologies, which create obstacles for comparability.** For example, Canada and the United States currently present their national balance sheets using a “mixed measure” approach; certain asset classes are presented using a market value approach, while others use a replacement cost estimate, and still others are presented on a historical-cost basis. In addition, the consumption of fixed capital—a key component in measuring net acquisition/disposition of nonfinancial assets — may be calculated in numerous ways. Straight line, useful life, geometric, and parabolic are four such measurement options for the consumption of fixed capital that reflect different views of the pattern of decline in the value of a fixed asset over its lifetime. While relevant and useful measures in their own rights, they provide widely varying results. One example is the result of the most recent historical revision conducted by the Australian Bureau of Statistics. The switch from replacement cost to geometric consumption of fixed capital was implemented for certain asset classes, resulting in a downward revision of 6½ percent of GDP in total value of nonfinancial assets. From a methodological standpoint, such a change was appropriate, but it also illustrates the challenge of comparing data within and across countries in the situation of having methods that are not standardized.

## V. CONCLUSIONS

**The limited available data on nonfinancial government assets paint the following picture.** The level of nonfinancial assets varies widely (averaging 67 percent of GDP). Reported nonfinancial assets are mostly structures (such as roads and buildings) and, when valued and reported (which is the case only for few countries) land and subsoil assets. In many, especially advanced, economies nonfinancial assets have increased over the past decade, reflecting mostly increases in commodity, land, and property values. The Great Recession has only dented these values compared to the earlier trend. Subnational governments own a large portion of nonfinancial assets, especially in federal states.

**Reported nonfinancial assets typically exceed financial ones.** Combined, both assets are higher than gross debt in most countries, including highly indebted economies, such as Japan or the United States. This balance sheet information brings us closer to a concept of “net worth,” and indicates positive values for most countries. However, it does not reflect assets that could be liquidated to service gross debt, or the value of income streams that could be generated from the nonfinancial assets, nor does it account for future liabilities from pension obligations or contingent liabilities. Nevertheless, this additional balance sheet information provides a new component for assessing the risks of public finances.

**Many countries have launched reforms to improve the efficiency of public administrations, but receipts and savings have been small, with a few exceptions.** Nonfinancial assets that could be sold tend to be relatively limited in most economies (estimates range from 4 percent of GDP in Italy, and up to 7 percent of GDP in Japan). This reflects, in part, political and social choices on how to provide public services, although such choices can change, and new sources may emerge through technological developments (such

as spectrums and accessibility of subsoil assets). The United Kingdom is an example where large sales of nonfinancial assets took place as a result of privatizing public corporations. Rather than disposing of existing stocks, more efficiently managing existing ones and the process of creating new ones (particularly buildings and structures), appear to be key strategies for the future, given current social choices. This could include new financing arrangements, such as the leasing of buildings, and the collection of user charges (such as road tolls), including through public-private-partnerships, since a large share of nonfinancial assets is public infrastructure. Sizeable yields can mostly be expected from user charges, since pure administrative functions are typically small, and instead nonfinancial assets are used to provide public services, such as education, health, and security.

**Expanding and improving the data on nonfinancial assets will be a first step for more transparency and eventually more effective asset management.** Currently, only 35 countries report to international organizations (IMF and OECD), with many reporting only few sub-groups of asset types. The type of source data (financial accounting or surveys) depends largely on which agency reports the data. For national accounts (and reporting to the OECD), statistical agencies generally rely on surveys, using the perpetual inventory method as valuation. For the GFS, typically, financial accounts serve as the basis, with a range of valuation methodologies being used. Also, the scope of assets included for both series can differ. Both approaches have pros and cons, and some countries even use both, each showing different values and trends. This clearly complicates communication. Thus, in an international context, and for comparability purposes, moving toward one standard coverage and greater consistency in valuation methodologies would be desirable.

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**Appendix Table 1. Nonfinancial Assets: Country-Specific Details**

	Australia	Austria	Barbados <sup>1</sup>	Belgium	Bolivia <sup>1</sup>	Canada	Colombia <sup>1</sup>	Costa Rica <sup>1</sup>	Czech Republic	Dominican Republic	El Salvador	Estonia
Latest available year	2010	2011	2010	2011	2007	2010	2010	2010	2011	2006	2010	2009
<b>Nonfinancial assets</b>	<b>109.3</b>	<b>37.0</b>	<b>33.7</b>	<b>37.6</b>	<b>5.7</b>	<b>43.1</b>	<b>35.7</b>	<b>48.7</b>	<b>161.3</b>	<b>11.0</b>	<b>1.5</b>	...
Produced assets	40.7	37.0	...	...	...	33.9	...	...	138.8	...	...	...
Fixed assets	40.6	37.0	17.3	37.6	3.2	33.9	26.3	0.9	131.7	10.8	0.9	...
Tangible fixed assets	38.6	36.8	...	37.5	...	33.9	...	...	131.4	...	...	...
Dwellings	0.5	0.2	13.7	0.0	2.8	0.9	22.6	0.6	5.7	9.3	0.4	3.8
Other buildings and structures	33.3	34.1	...	35.7	...	30.5	...	...	122.0	...	...	...
Nonresidential buildings	...	...	...	13.4	...	...	...	...	82.8	...	...	...
Other structures	...	...	...	22.2	...	...	...	...	39.1	...	...	...
Machinery and equipment	2.9	2.5	1.7	1.8	0.3	2.5	2.8	0.3	3.7	1.5	0.3	...
Cultivated assets	0.0	...	...	0.0	...	...	...	...	0.0	...	...	...
Intangible fixed assets	2.0	0.3	...	0.2	...	...	...	...	0.3	...	...	...
Mineral exploration	0.0	...	...	0.0	...	...	...	...	0.0	...	...	...
Computer software	0.6	...	...	0.2	...	...	...	...	0.3	...	...	...
Entertainment, literary or artistic originals	0.1	...	...	0.0	...	...	...	...	0.0	...	...	...
Other intangible fixed assets	1.3	...	...	...	...	...	...	...	0.0	...	...	...
Inventories	0.1	...	...	...	0.1	0.0	1.0	...	7.0	...	0.1	...
Valuables	...	...	...	...	...	...	0.1	...	0.1	...	...	...
Nonproduced assets	68.6	...	16.5	...	2.4	...	8.3	47.8	22.5	0.2	0.5	...
Tangible non-produced assets	68.6	...	...	...	...	...	...	...	19.7	...	...	...
Land	21.9	...	16.4	...	2.4	9.2	4.4	47.8	19.7	0.2	0.5	...
Subsoil assets	46.0	...	...	...	...	...	4.0	...	0.0	...	...	...
Noncultivated bio and water resources	0.7	...	...	...	...	...	...	...	0.0	...	...	...
Intangible nonproduced assets	0.0	...	0.1	...	...	...	...	...	2.8	...	...	...
Sources	OECD	OECD/ Eurostat	GFS	OECD	GFS	OECD/ GFS	GFS	GFS	OECD/ Eurostat	GFS	GFS	OECD/ Eurostat

**Appendix Table 1. Nonfinancial Assets: Country-Specific Details (continued)**

	Finland	France	Germany	Hong Kong SAR	Hungary	Israel	Italy	Japan	Korea	Latvia	Lithuania
Latest available year	2011	2011	2011	2010	2010	2007	2010	2010	2010	2010	2011
<b>Nonfinancial assets</b>	<b>47.7</b>	<b>88.3</b>	<b>43.4</b>	<b>18.3</b>	<b>115.1</b>	<b>37.8</b>	...	<b>120.2</b>	<b>127.9</b>	<b>184.0</b>	<b>57.2</b>
Produced assets	47.7	54.4	43.4	...	115.1	37.8	...	...	57.1	168.8	57.2
Fixed assets	47.7	53.5	43.4	18.1	115.1	37.4	...	93.9	...	166.4	57.2
Tangible fixed assets	47.5	53.1	43.3	...	114.9	...	...	94.2	56.5	165.9	56.8
Dwellings	0.6	2.9	1.3	15.0	3.5	0.0	3.5	91.4	...	1.6	2.1
Other buildings and structures	44.2	48.9	40.7	...	105.9	35.3	...	...	...	160.4	51.8
Nonresidential buildings	19.6	18.2	...	...	...	...	...	...	...	...	...
Other structures	24.6	30.7	...	...	...	...	...	...	...	...	...
Machinery and equipment	2.7	1.3	1.3	0.6	5.5	...	...	2.2	...	3.9	3.0
Cultivated assets	...	0.0	0.0	...	0.0	0.0	...	...	...	...	...
Intangible fixed assets	0.2	0.4	0.2	...	0.2	...	...	...	0.1	0.6	0.4
Mineral exploration	...	0.0	...	...	...	...	...	...	...	...	...
Computer software	0.2	0.4	...	...	0.2	...	...	...	...	0.3	...
Entertainment, literary or artistic originals	...	0.0	...	...	...	...	...	...	...	0.1	...
Other intangible fixed assets	...	0.0	...	...	...	...	...	...	...	0.1	...
Inventories	...	0.9	...	0.1	...	0.3	...	0.4	0.5	2.3	...
Valuables	...	0.0	...	...	...	...	...	...	...	...	...
Nonproduced assets	...	33.9	...	...	...	...	...	26.0	69.3	15.2	...
Tangible non-produced assets	...	33.9	...	...	...	...	...	...	69.3	...	...
Land	...	33.8	...	...	...	...	...	26.0	63.3	...	...
Subsoil assets	...	0.1	...	...	...	...	...	...	4.9	...	...
Noncultivated bio and water resources	...	0.0	...	...	...	...	...	...	1.0	...	...
Intangible nonproduced assets	...	0.0	...	...	...	...	...	...	...	...	...
Sources	OECD/ Eurostat	OECD/ Eurostat	OECD/ Eurostat	GFS	OECD/ Eurostat	OECD	OECD/ Eurostat	GFS	National source	Eurostat	Eurostat

**Appendix Table 1. Nonfinancial Assets: Country-Specific Details (completed)**

	Luxem- bourg	Nether- lands	New Zealand	Norway	Poland	Russian Federation	Slovak Republic	Slovenia	Sweden	Switzerland	United Kingdom	United States
Latest available year	2010	2011	2010	2010	2010	2010	2010	2011	2010	2009	2011	2011
<b>Nonfinancial assets</b>	<b>87.3</b>	<b>99.4</b>	<b>94.0</b>	<b>46.5</b>	...	<b>46.3</b>	<b>74.4</b>	<b>51.2</b>	...	<b>23.2</b>	<b>49.2</b>	<b>66.3</b>
Produced assets	87.3	63.6	...	...	...	...	...	51.2	...	...	49.2	66.3
Fixed assets	87.3	63.5	...	46.5	...	38.8	66.0	51.2	...	19.8	49.2	66.3
Tangible fixed assets	87.0	63.2	...	...	...	...	...	50.2	...	...	49.2	65.8
Dwellings	0.2	0.5	...	43.0	4.2	17.1	61.2	5.5	0.3	18.6	0.6	2.2
Other buildings and structures	83.7	59.9	...	...	...	...	...	40.8	...	...	46.4	60.7
Nonresidential buildings	42.7	17.1	...	...	...	...	...	23.9	...	...	17.9	30.0
Other structures	41.0	42.9	...	...	...	...	...	17.0	...	...	28.5	30.7
Machinery and equipment	3.0	2.8	...	3.5	...	5.0	4.3	3.8	...	1.1	2.1	2.9
Cultivated assets	0.0	0.0	...	...	...	...	...	0.0	...	...	0.1	...
Intangible fixed assets	0.3	0.3	...	...	...	...	...	1.0	...	...	0.0	0.5
Mineral exploration	0.0	0.0	...	...	...	...	...	...	...	...	...	...
Computer software	0.3	0.3	...	...	...	...	...	0.4	...	...	...	0.5
Entertainment, literary or artistic originals	0.0	0.0	...	...	...	...	...	0.0	...	...	...	...
Other intangible fixed assets	0.0	0.0	...	...	...	16.7	...	0.5	...	0.1	0.0	...
Inventories	...	0.1	...	...	...	5.0	0.8	...	...	0.1	0.0	...
Valuables	...	...	...	...	...	...	0.0	...	...	...	...	...
Nonproduced assets	...	35.7	...	...	...	...	7.6	...	...	3.3	...	...
Tangible non-produced assets	...	35.7	...	...	...	2.6	...	...	...	...	...	...
Land	...	9.0	...	...	...	0.1	7.5	...	...	3.3	...	...
Subsoil assets	...	26.8	...	...	...	...	...	...	...	...	...	...
Noncultivated bio and water resources	...	...	...	...	...	2.5	...	...	...	...	...	...
Intangible nonproduced assets	...	...	...	...	...	...	...	...	...	0.0	...	...
Sources	OECD/ Eurostat	OECD	GFS	GFS	OECD	GFS	GFS	OECD/ Eurostat	OECD/ Eurostat	GFS	OECD/ Eurostat	OECD/ GFS