

# HOUSING

# FINANCIALIZATION:

THE INTERNATIONAL LANDSCAPE A report for the Office of the Federal Housing Advocate

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The opinions, findings, and conclusions or recommendations expressed in this document are those of the author and do not necessarily reflect the views of the Canadian Human Rights Commission or the Federal Housing Advocate.

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### **Executive Summary**

This report explains the international housing landscape and the political and historical framework that has led to its <u>financialization</u>. The US dollar and the central banks, especially the US Federal Reserve (Fed), play a crucial role in this process. The report also discusses the role of shadow banking entities, commercial banks, sovereign wealth funds and pension funds. These entities stem from a political context characterized by the proliferation of tax havens, the deterioration of progressive fiscal regimes and the deregulation of financial markets leading to growing social inequality.

The Bank Committee on Banking Supervision (BCBS) establishes the international regulatory framework for banks. The establishment of a new regulatory framework known as Basel III was its response to the financial crisis of 2007. Basel III is a set of measures targeting banking issues, especially excessive risk taking in the mortgage market. However, some Commonwealth member countries, including Canada, have gotten around the Basel III requirements. This report analyzes Basel III effects on household debt and housing affordability in several countries.

The housing system is a political decision that shapes society in the long run. Thus, countries with comparable economic and cultural backgrounds that share the same international land-scape have housing systems that are highly different in terms of indebtedness, property, social stratification, affordability, mobility, and urban planning. The access to home property through mortgage indebtedness is the cornerstone of the "Commonwealth housing system." This report compares the Commonwealth housing system to the housing system of countries with similar socioeconomic conditions in terms of affordability, rent protection, and public housing.

This report analyzes the impact of housing financialization on human rights. The right to housing is found in the Universal Declaration of Human Rights and in many other international human rights treaties ratified by most governments around the world, including Canada (Farha, 2018b). In international human rights law, states are accountable for implementing the right to housing. States include all orders or levels of government—national, regional, and subnational—which includes municipalities and local governments (Farha, 2014).

In this sense, Canada passed the National Housing Strategy Act in 2019, which declared to be the housing policy of the Government of Canada to:

(a) recognize that the right to adequate housing is a fundamental human right affirmed in international law;

(b) recognize that housing is essential to the inherent dignity and well-being of the person and to building sustainable and inclusive communities;

(c) support improved housing outcomes for the people of Canada; and

(d) further the progressive realization of the right to adequate housing as recognized in the International Covenant on Economic, Social, and Cultural Rights.

Thus, this report identifies the shortcomings caused by housing financialization and particularly the specific defects of the Commonwealth housing system to comply with the Universal Declaration of Human Rights and the National Housing Strategy Act.

### Introduction: The Commodification of Housing

The Universal Declaration of Human Rights recognizes the right to an adequate standard of living. This right explicitly covers basic needs such as housing and medical care. However, the financial industry has managed to transform these rights into commodities (Bohoslavsky et al., 2020; UN Office of the High Commissioner for Human Rights (OHCHR), 1996). Thus, the financial sector has penetrated many aspects of everyday life.

As explained below, the Nixon Shock of 1971 was crucial for the financialization of basic needs. Since then, finance has become a business clearly differentiated from commercial banking in several respects, including its detachment from productive activities in the <u>real economy</u> (Sassen, 2019).<sup>i</sup>

### The Financialization of Housing

Finances flow across the world through the regulated and the non-regulated circuits. Banks are the main financial components of the regulated circuit, and shadow banking entities from the non-regulated circuit. These latter entities are so-called because they use tax havens to avoid taxation and public control, despite having their headquarters in global cities, such as London, Toronto and New York. Most private equity firms and asset management entities operate through shadow banking. Nevertheless, their main funders are regulated entities such as pension funds, sovereign wealth funds, and commercial banks. Thus, those entities play the role of being the meeting point between regulated business and shadow banking.

Private-equity firms have been investing in basic needs, such as housing, energy, and health, because people cannot avoid them. However, housing presents some unique features. It differs from other market commodities, because housing is not only a necessity, but it also requires most households to spend a significant share of their income (Arnott, 2015).

In parallel, most governments have failed to protect the right to housing, and central banks have made vast amounts of money available to the financial sector during the last few decades. For the above reasons, the managers of the private equity firms and other financial vehicles have targeted housing as the best sector to yield significant profits.

The Federal Reserve System of the United States (the Fed) is the leading central bank. This institution fuelled the market with cheap money to overcome the successive financial crises: the 1987 stock market crash, the dot-com bubble burst in the early 2000s and the global financial crisis of 2007–2008 (GFC). Thus, the Fed fuels the housing price bubble through expansive monetary policies such as <u>quantitative easing</u>. Likewise, the other main central banks have also implemented these policies to overcome the economic impact of the 2008 crisis and the COVID-19 pandemic. The Bank for International Settlements established the international regulatory framework for commercial banks in 2010. This set of rules is known as Basel III. The regulation encouraged banks to sell their real estate assets to meet their solvency requirements. The GFC had resulted in an astonishing amount of non-performing loans worldwide. Therefore, there was a market opportunity to buy portfolios composed of those assets at a reduced price.

Private equity firms need funding to purchase housing assets. Commercial banks have frequently been the main funders of these operations. Basel III established that commercial banks could lend up to 80% of the value of the process to the purchaser.

The rest of the funding has come from internal and external sources, with external funding obtained through investment funds. Private equity firms create investment funds in tax havens. Pension funds, sovereign wealth funds, and high-net-worth individuals are the prominent investors in these funds, whose term of maturity is usually five years.

Private equity firms have different legal forms, such as publicly traded or limited partnership companies. The legal structure depends on their capital needs and the transparency requirements. These companies can also be classified by their business strategy.

## The International Context of Housing Financialization

The following points describe the political landscape of housing financialization.

### The Monetary System

"The United States can pay any debt it has because we can always print money to do that. So, there is zero probability of default." Alan Greenspan (2011).

### Political Background: Bretton Woods<sup>ii</sup>

Since Bretton Woods, the US dollar has become the de facto global currency (Eichengreen et al., 2019). Thus, the US Federal Reserve (Fed) had the privilege of creating the currency for international commerce. According to that agreement, most countries, including Canada, had to align their national currency to the US dollar through a fixed exchange rate. The Fed backed foreign central banks' dollars with gold at the official exchange rate of \$35 per ounce. This way, the gold standard was the basis for the international monetary system from 1944 to 1971.

### Political Background: The Nixon Shock

The Vietnam War brought about the collapse of Bretton Woods because the Fed had to print an astonishing amount of dollars to fund the war expenses. Thus, there was not enough gold in the US bullion depository of Fort Knox to convert the dollars accumulated by foreign central banks. In 1971, the French and the British governments claimed the conversion of their dollars into gold, as the Bretton Woods Agreements had established. President Richard Nixon rejected the claim, and the US government unilaterally cancelled the gold standard.

The US administration feared that the abandonment of the gold standard would cause a decline in the global demand for US dollars. Therefore, it could damage its status as the leading international currency. The Nixon administration used oil as the mainstay of the US dollar value to solve this problem. As oil is the primary energy source globally, who controls oil can control international trade. For this purpose, the USA reached a series of agreements with the leading oil producers to price oil in dollars to maintain the global dollar demand.<sup>III</sup>

Thus, the dollar has maintained its status as the world's reserve currency, despite the persistent issues around the balance of payments and public budget deficit of the USA. The US balance of payments has accumulated a debt of US \$12.5 trillion since the "Nixon Shock" (International Monetary Fund, 2019). In the same way, the accumulated public budget deficit since 1971 is almost double the US GDP (185%), while during the Bretton Woods Accord's period of validity, the debt had been insignificant (5.5% GDP) (UC Santa Barbara, 2020). Despite the "twin deficit" some countries have decided to peg their currency to the US dollar. For instance, Saudi Arabia pegged its currency to the US dollar, but the Canadian dollar became a floating currency. The turn from pegged to free-floating exchange rates granted central banks autonomy over their monetary creation policies, which was especially important for the Fed, because the USA can maintain a twin deficit without damaging the US dollar status. Thus, 60% of allocated reserves worldwide are in dollars (International Monetary Fund, 2021).

### The Role of Central Banks

Most modern paper currencies, such as the Canadian and the US dollar, are <u>fiat</u> currencies. Central banks can create money out of thin air since the abandonment of the gold standard. Thus, central banks use the <u>money supply</u> to control the inflation rate and intervene in economic performance. These institutions adopt inflation-control targets to protect their currency value through monetary policy.<sup>iv</sup> Valéry Giscard d'Estaing, a former minister of Finance and president of France, coined the term "exorbitant privilege" to refer to the US power of issuing the international currency reserve. The economist Barry Eichengreen explained that privilege: "It costs only a few cents for the Bureau of Engraving and Printing to produce a \$100 bill, but other countries had to pony up \$100 of actual goods in order to obtain one." (Eichengreen, 2011).

Ronald Reagan's administration deregulated the financial markets at the beginning of the 1980s because of the dollar's status. The Fed chair, Alan Greenspan, provided cheap money and supplied liquidity through <u>open market operations</u> to overcome the impact.<sup>v</sup> Thus, the US central bank purchased securities and federal funds from the financial sector in considerable numbers. This strategy, known as the "Greenspan put," controlled the interest rates and prevented the debt crisis from spreading throughout <u>the real economy</u> (Eichengreen, 2018). The Greenspan put meant that Federal Reserve is committed to supporting the stock markets when they decline beyond a certain threshold, although some authors state that the actual impact of this policy is not clear.<sup>vi</sup> Be that as it may, this monetary policy created a false perception of safety in the financial sector (Walks, 2014). Deregulation allowed for greater financial risk taking, which led to the stock market crash of 1987 known as Black Monday. Whatever the risk, if there were to be a market failure, the Fed would fix the situation by injecting enough dollars into the system (Stiglitz, 2009).

The Fed fixed the burst of the dot-com bubble in the early 2000s through expansive monetary policies, while the authorities mostly ignored the accounting position of the financial sector since, because of deregulation, many financial entities operated from tax havens (Shaxson, 2021). At the same time, commercial banks granted an unprecedented number of mortgages, because of the low interest rates set by central banks and the existence of a housing price bubble in many countries, including Canada (Walks, 2014). Banks could sell these mortgage contracts in the secondary markets to obtain more liquidity, with which banks could grant more mortgages (Heuson et al., 2001). Thus, the combination between central Banks's low-interest rates, quick profits, deregulation, and moral hazard led to the housing bubble's burst in 2007. However, the dimension of the crisis was different this time, and finance jeopardized the global economy.

Central banks had to adopt new policies to bail out the financial system. The supply of liquidity and cheap loans for the financial sector was insufficient. The level of indebtedness in the housing sector and the losses caused by speculation were too large for conventional monetary policies. Most Western governments including Canada had to bail out financial companies to avoid the contagion of the crisis (Walks, 2014; Stiglitz, 2009).

Central banks implemented unconventional open market operations, such as quantitative easing policies. This meant central banks could buy government bonds and distressed financial assets such as mortgage-backed securities. For instance, the Fed (Varoufakis, 2011) and the Central Bank of Canada bought these impaired assets on the open market (Walks & Clifford, 2015).

However, these institutions failed to avoid forced evictions, which particularly affected minority groups (Sassen, 2012). For instance, Black tenants face a higher-risk of evictions in Toronto (Lewis, 2022; Leon & Iveniuk, 2020).

According to the type of asset, shadow banking entities used "core," "value add," and "opportunistic" investment strategies (August, 2020). Shadow banking entities have purchased distressed real estate properties mainly in Southern Europe, Ireland, and the USA as opportunistic investors. Other shadow banking entities are specialized in core investments for the long-term.

Governments and central banks have implemented a new set of expansive monetary and public aid policies to overcome the economic crisis caused by the COVID-19 pandemic. Central banks purchased corporate bonds and lowered interest rates to their minimum. In 2007, the central banks in Canada, the US, euro area, the UK, and Japan had total assets ranging from 2% to 20% of nominal GDP. However, by the end of 2020, the Bank of Canada's balance sheet was 24% of GDP, the Fed's 34%, the European Central Bank's 59%, the Bank of England's 40%, and the Bank of Japan's 127% (Cecchetti & Tucker, 2021; BofA Global Research, 2020).

Central banks have adopted unconventional policies. The Bank of Canada has recently purchased Canada Mortgage Bonds (CMBs) for almost CAN\$10 billion (Bank of Canada, 2021). CMBs are a state-backed security for financing mortgages. The Bank of Canada decided to buy Canada Mortgage Bonds to cap mortgage rates, preventing them from rising too much during the COVID-19 pandemic. These interventions provided additional liquidity to Canadian banks, maintained the flows of mortgage credit, and fuelled the Canadian housing bubble during the COVID-19 pandemic. Thus, Canada's pandemic housing boom has attracted a larger-than-usual share of speculators (Saminather, 2021).

At the same time, from March 2020 to June 2021, the Federal Reserve increased its mortgagebacked securities holdings from \$1.4 trillion to \$2.3 trillion (Federal Reserve, Bank of Dallas, 2021).

These policies will strongly impact the housing market, especially in countries considered havens for investors, because of the excess of cheap money in the financial system. In Canada, house-hold debt increased to 9.38% of GDP from 2019 to 2020, which was the fourth worldwide (International Monetary Fund, 2022).

### The Proliferation of Tax Havens

### Definition

A tax haven is a jurisdiction that allows foreigners to avoid the fiscal control of their countries. There are two main reasons for their existence: illegal sources of money and tax avoidance. So, tax havens are characterized by different levels of secrecy and low rates of taxation for foreigners (Gabarre, 2019).

### The Origin of Tax Havens

European empires controlled the international commerce of energy resources and commodities through colonization. Thus, the French, the Dutch, and, especially, the British Empire and the

USA were able to manage commodities such as oil. However, after the destruction of Europe and the subsequent gradual decolonization, European countries lost control over international commerce. So, in the 1960s, the countries with powerful empires, notably the United Kingdom, designed political structures to maintain control over profits in formerly colonized countries (Shaxson, 2019; Christensen, 2018). These legal devices saw the rise of tax havens that allowed the elites to operate in the shadows through transnational companies—in this way avoiding government control.

### The Proliferation of Tax Havens

Even in the 1980s, using a tax haven came with important logistical difficulties. Thus, before the development of the internet, the financial elite were the only ones able to use tax havens.

Currently, however, the use of tax havens has expanded to vaster social segments that grow year after year because of electronic banking (Meinzer, 2015). Thus, Caribbean offshore financial centres receive almost one quarter of Canadian direct investment abroad (CDIA) in finance and insurance. A number of Caribbean economies are among the top 10 destinations of CDIA: Bermuda, the Cayman Islands, and Barbados (Government of Canada, 2021). Canadian investments in the Caribbean countries, and possibly to some extent in Luxembourg and the Netherlands, primarily transit through these offshore financial centres, though they are typically destined for other countries (Damgaard et al., 2019). Thus, the Netherlands is the second Foreign Direct Investor in Canada, Cayman Islands is the sixth and Barbados is the ninth (Government of Canada, 2021).

### Tax Havens and Housing

Two facts are crucial to understand the role of tax havens in housing: first, there are huge fortunes hidden in tax havens such as the British Crown Dependencies and the Caribbean islands of the Kingdom of the Netherlands (Shaxson, 2011). Second, inequality has weakened economic growth (Piketty, 2019). So, most private equity firms have decided to seek profit beyond consumption, turning to people's basic needs, including housing (Blackstone, 2021).

### **Deterioration of Progressive Fiscal Regimes**

After the Second World War, Western countries had to face two challenges: rebuilding their destroyed infrastructure and reducing social inequality to overcome the socialist regimes in the European East. The best way identified to achieve both aims was redistributing the national income by means of progressive fiscal programs. Thus, the average top income tax rate was 81% in the USA from 1932 to 1980 (Piketty, 2019).

The US government accounts during the Bretton Woods period were balanced. But after the Nixon Shock, the government deficit has been persistent because the Fed can finance the government deficit without damaging the currency's value. The Reagan government seized this opportunity to lower taxes on people with big incomes and owners of great wealth. Although the government deficit was steadily growing, the average top income tax rate in the USA was 39% from 1980 to 2018 (Piketty, 2019).

In the same way, the UK and Canada followed this fiscal policy. Britain's average top income tax was 89% from 1932 to 1980, and it dropped to a 46% average since Margaret Thatcher's tenure (Piketty, 2019). In this sense, the top marginal rate in Ontario was around 90% in the 1950s and dropped to 55% in 2010 (Yalnizyan, 2010). In 2021, the top marginal rates in Canadian provinces and territories range from 44.50% in Nunavut to 54% in Nova Scotia (BDO Canada, 2021).

In Canada, the most affluent people almost doubled their share of national wealth over the last 50 years. The share of GDP for individuals in the top 1% of income rose from 7.8% GDP in 1970 to 14.8% in 2021, and the share for those in the top 10% rose from 25% in 1970 to 41% in 2020 (World Inequality Database, 2020). The share for the top 1% highest incomes in the US rose from 12% in 1990 to 18% in 2020; in the UK, this proportion increased from 6% in the mid-1970s to 15% in 2007 (House of Commons Library, 2012).

Tax systems have lost most of their redistributive capacity due to the deterioration of the progressive taxation scales and evasion through tax havens. As well, multinational companies can avoid corporate tax thanks to jurisdictions such as Luxembourg and the Netherlands, which provide numerous tax loopholes for "tax optimization" (European Parliament, 2019; Damgaard et al., 2019).

The redistribution of the national income fosters economic growth in an economy based on consumerism, which was the case in Western economies. The standard explanation for this phenomenon is that people with low incomes tend to spend all of their income to meet their basic needs. However, high-income people tend to save a much larger proportion of their income, as they do not require it for day-to-day survival. Therefore, distributing the national income through progressive fiscal regimes fosters consumption and economic growth.<sup>vii</sup>

The more significant the progressive taxation scales, the greater the economic growth. However, the tax cuts of the neoliberal era have produced a phenomenon that may seem paradoxical at first sight. While increasing wealth accumulates in tax havens ready to be invested, economic growth is slowing. Therefore, managers of private equity funds tend to invest in basic needs that cannot be avoided, such as housing or health (Gabarre, Tocar fondo: la mano invisible detrás de la subida del alquiler, 2019; Blackstone, 2021)

### **Deregulation of Financial Markets**

"Those of us who have looked to the self-interest of lending institutions to protect shareholders' equity—myself especially—are in a state of shocked disbelief." Alan Greenspan, Congressional testimony (2008)

The Fed relieved the restrictions imposed on financial markets by the late 1970s.<sup>viii</sup> The substitution of the gold standard by the petrodollars system and the twin US deficit gave free rein to the Fed's creation of money, especially during Ronald Reagan's tenure. Thus, American banks managed to resume their activities related to the securities market.

Alan Greenspan also advocated for the deregulation of financial <u>derivatives</u> during his tenure. The Federal Reserve chairman declared in 2004: "What we have found over the years in the marketplace is that derivatives have been an extraordinarily useful vehicle to transfer risk from those who shouldn't be taking it to those who are willing to and are capable of doing so." However, there was wide criticism of derivatives even within the financial sector. For instance, Warren E. Buffett declared that derivatives were "financial weapons of mass destruction, carrying dangers that, while now latent, are potentially lethal" (Buffet, 2002).

Mortgage-backed securities (MBS) are securities backed by a collection of mortgages bought from the banks that issued them. The US government allowed them to be issued for the first time in the early 1980s. After 2002, collateralized debt obligations (CDOs) became vehicles for refinancing mortgage-backed securities. Thus, the banks could combine in an MBS a mortgage with a low risk of default—for instance a loan borrowed by an affluent lawyer—with subprime mortgages. In 2007, 27% of US mortgages were subprime (Varoufakis, 2011). Lending standards in Canada had also declined substantially, and a particularly Canadian form of "subprime" mortgages had grown strongly within the residential mortgage market. The Canadian banks in fact needed and received a substantial bailout (Walks, 2014). Additionally, the allowable amortization term was extended to 40 years, and the minimum down payment eligible for federal mortgage insurance was reduced from 5% to 0% (Walks, 2014). However, the credit rating agencies assigned positive credit ratings to those financial products, allowing financial entities to invest in them. Thus, commercial banks obtained liquidity to grant more and more mortgages as, consequently, CDOs fuelled the housing bubble (Walks, 2014). The risk taken became so high that mortgage-backed securities issued by investment banks triggered the GFC when many people could not make their mortgage payments.

Obama's administration passed the Dodd-Frank Act in 2010 to overhaul financial regulation.<sup>ix</sup> However, the Dodd-Frank act was partially repealed during Donald Trump's administration by the Economic Growth, Regulatory Relief and Consumer Protection Act. This law has raised the threshold to \$250 billion from \$50 billion under which banks are deemed too necessary to the financial system to fail and subject to stricter regulation. Thus, this law exempted small banks from provisions of the Dodd-Frank Act, such as some restrictions on high-risk investment.

### **Privatization and Commodification of Public Assets**

In Canada, the disproportionate reliance on the mortgage lending system to save the banks and reignite the economy has led to severe distortions in the market which have worked to shift capital away from productive investment into an already-overbuilt housing sector (Walks, 2014).

The US economy also shifted from a productive economy, based on industry and technology, to an extractive economy, focused on finance and technology, in the early 1980s. The USA has accumulated a persistent deficit in its balance of payments since then. On average, The US GDP growth from 1990 to 2020 (1.1%) was half of that from 1950 to 1990 (2.2%). The trend in Europe is even more acute: economic growth was less than one third between 1990 and 2020 (0.9%) what it was between 1950 and 1990 (3.3%).

The explanation is that economic inequality has substantially increased in Canada, the USA, and Europe since the neoliberal era of Margaret Thatcher and Ronald Reagan (Piketty, 2019). For instance, US real wages had been growing steadily from 1850 to 1973, whereas, today they have not regained their level achieved in 1973 (Varoufakis, 2011). In this sense, most societies are in a

vicious circle of growing inequality and weak growth performance. For the above reasons, the productive economy seldom gives high yields.

Pension funds have a huge availability of capital and hence a considerable amount of money ready to be invested. But perhaps most importantly, the Fed has an almost unlimited power to create money. As seen above, the Fed has used this power without taking care of the restrictions that other central banks must take into account to preserve the value of their currency. Thus, the Fed has flooded the US financial system with dollars since the 1980s. Such financial innovations have been at the heart of the power of the US "Dollar-Wall Street" regime and the rise of globalization (Gowan, 2019; Cox, 2009).

Neoliberalism has promoted the privatization of public goods and services. These are usually related to basic needs such as energy, health, transport, or housing because people cannot help meeting them. Moving the provision of primary needs from the public to the private sector has allowed the financial industry to penetrate these sectors.

In Canada and abroad, public production of goods and services expanded considerably after the Second World War. The government of Canada has used state-owned enterprises to implement public policy for many decades. Most provincial governments nationalized industries they deemed to be natural monopolies, such as the generation and distribution of electricity, or industries considered vital to the development of provincial economies (Levac & Woolridge, 1997). However, the deterioration of progressive fiscal regimes led to public deficits, and many governments embarked on privatization programs. Canada privatized Crown corporations such as the Canadian National Railway Company, the Canada Development Corporation, and Petro-Canada. Alberta, Nova Scotia (Levac & Woolridge, 1997), and Ontario also partially privatized their electric utilities (Hydro One, 2016).

Privatization has also targeted human rights such as health, long-term care (Brown, 2022), and education. In the 1988–89 academic year, tuition fees accounted for an average of 11% of university revenues, compared to 28% in 2017–18. In the same period, the share of government funding dropped from 71% to 47%, leaving post-secondary institutions to rely on increasingly unaffordable tuition fees (Tranjan, 2021). Privatization has benefited the financial industry of some countries—especially the US, whose financial industry can extract profit from basic needs worldwide due to the "exorbitant privilege" of coining the world's reserve currency. From the world's 25 largest private equity firms by the funds raised, 18 come from the USA, 2 from the UK and 1 (Brookfield) from Canada (Wallach, 2020). Housing has become the main target of private equity firms due to its commodification.

### The Mortgage Regulatory Framework

"Household debt still poses risks to the economy and financial stability, and its sheer size means that its risks will be with us for some time." Stephen Poloz, 9th Governor of the Bank of Canada and member of the board of directors for the Bank for International Settlements (2018).

The financial system is highly connected across borders. Banks lend and borrow huge amounts of money from foreign banks and investment institutions. Since there is a high risk of spreading the financial problems of one country to the international financial system, governments deal with risk by means of international bodies.

The most important institution to globally control the banking system is the Bank for International Settlements (BIS), whose headquarters are in Basel (Switzerland). The BIS is owned by 63 central banks, representing countries from around the world that together account for about 95% of world GDP. It is considered as the bank of central banks and establishes the international regulatory framework for depository financial institutions (commercial banks and savings banks).

The Bank for International Settlements of Basel (BIS)<sup>x</sup>

The development of globalized financial markets requires a common supervisor for prudential reasons. Supervision standards and capital requirements differed from country to country. The deficiencies of the financial system became fully evident during the GFC. Therefore, the BCBS developed a new framework for banking known as Basel III. The G20 endorsed the Basel III agreement in November 2010.

The BIS identified the massive granting of mortgages as the main cause of the GFC. Therefore, Basel III established a stricter framework for the solvency of banks and especially for the granting of mortgages. However, some countries got around these requirements, as discussed later in the text.

It is essential to point out that Basel does not regulate the whole financial system. The scope of banking supervision excludes most private equity firms, despite their deep links to commercial banks. Shadow banking entities can invest in housing without regulatory limits, though they cannot grant mortgages. Therefore, shadow banking entities have heavily invested in housing to rent or sell the units purchased. The activity of shadow banking is neither regulated nor supervised, since they operate from tax havens. These entities pose a risk to the whole financial system that no international institution has yet mitigated.

### Third Basel Accord (Basel III)

The Bank Committee on Banking Supervision's goal is to prevent the contagion of financial problems of one bank or one country to the international financial system. Therefore, the Basel regulations intend that banks not take excessive risks to their resources. Thus, Basel establishes the minimum levels of a bank's capital relative to the risk it has taken on. Banking supervisors use risk-weighted assets to determine the minimum capital banks must hold. Basel defines capital and calculates the risk according to the characteristics of every detail of an investment. The minimum capital for a bank with risk-weighted assets is 10.5% (total capital requirement of 8% and 2.5% capital conservation buffer).<sup>xi</sup>

While the Basel II standardized approach assigned a flat risk weight to all residential mortgages, mortgage risk weights depend on the mortgage's <u>loan-to-value (LTV</u>) ratio in Basel III. LTV is a good indicator of the risk involved for the lender or the borrower. The higher the LTV ratio, the higher the risk (Kokko, 2019). If the down payment does not reach 20% LTV, Basel capital requirements increase drastically.<sup>xii</sup>

As previously stated, banks usually finance their real estate operations through the issue of <u>mortgage-backed securities (MBSs</u>) in the financial markets. The BIS establishes that to be eligible for the risk weight discounts set out in Basel III, the residential real estate must meet a loan-to-value ratio of 80% or lower (Bank for International Settlements, 2020).<sup>xiii</sup>

Hence, in the case of granting mortgages with an LTV ratio of 80% or higher, banks should increase substantially their capital. In this way, Basel III has established a standard down payment for mortgages of 20% LTV across the world. The Central Europe model of housing inspired this policy of strict restrictions for commercial banks to grant mortgages (Zabai, 2017). If a home has a value of \$250,000, the down payment must be at least \$50,000. Transfer taxes on buying real estate and professional fees (real estate agencies, attorneys, notaries, property register) are in addition to this amount.

This restriction has caused the exclusion of people who cannot save and do not inherit a considerable amount of capital from home property. Basel III has determined a new housing model worldwide, especially in countries that had based their housing policy on access to property through indebtedness such as Spain, Ireland, and the USA. Since these countries had based their housing system on property, there is neither enough legal protection for tenants nor a sufficient provision of public housing. This shift has caused a "housing shock" in those societies since the implementation of Basel III in 2011 (Hearne, 2020). However, as will be discussed later, some countries such as Canada and the UK have gotten around Basel III down payment requirements through public intervention.

### Implementation of Basel III in Canada and Other Countries of the Commonwealth

United Kingdom, Canada, Australia, and New Zealand base their housing system on home ownership and indebtedness through mortgages. For this reason, their governments have provided public grants to get around the 20% LTV down payment. In the referred to countries, it is enough with a 5% LTV down payment because of public intervention. The housing schemes follow the same pattern in these four countries, all members of the Commonwealth of Nations since its formation in 1931.

### The Role of the Canada Mortgage and Housing Corporation in Fostering Indebtedness

Access to home property is a central concept of the discourse of Canada's current federal government, identifying home with ownership (Tasker, 2021). For instance, the motto of the Liberal housing platform, *A Home for Everyone*, proceeds as follows: "Every Canadian deserves a place to call home. And for many—young people in particular—the dream of owning their own home feels like it's moving further out of reach." (Liberal Party of Canada, 2021).

The Canada Mortgage and Housing Corporation (CMHC) is a crown corporation which plays a crucial role in the Canada housing system, since it insures bank-issued mortgage loans and securitizes mortgages. The Canadian Government initiated the Canada Mortgage Bond in 2001 (CMB). Under this program, CMHC purchases mortgages from the banks, allowing them to free up capital to grant more mortgages (Walks, 2014) and, as a consequence, the CMB program fuels the housing bubble. In the aftermath of the GFC, the CMHC purchased <u>mortgage-backed</u> <u>securities (MBSs)</u> valued at \$137 billion directly from banks to maintain the mortgage market.

### Canada Mortgage and Housing Corporation (CMHC) Mortgage insurance compared to the UK, New Zealand and Australian schemes

CMHC provides mortgage loan insurances when the borrower cannot meet the standard 20% LTV down payment (CMHC, 2021).

The government has provided a set of grants to get around the 20% LTV down payment, which is the most critical restriction of Basel III to the access of home property. This way, commercial banks can get around Basel III restrictions. If a home has a value of \$500,000, the borrower only needs \$25,000 (5% LTV) instead of the \$100,000 (20% LTV) standard of Basel III.

The CMHC mortgage insurance, the UK mortgage guarantee scheme<sup>xiv</sup>, the New Zealand first home loan scheme <sup>xv</sup> and the Australian first home loan deposit scheme<sup>xvi</sup> aim the same objective. These schemes offer banks the option to purchase a government backed guarantee on mortgages where a borrower has a deposit of only 5% LTV.

This insurance solely protects the lender in case the borrower can't make their payments. At any rate, the borrowers who take out any mortgage product under these schemes will remain responsible for repayments in the same way as a normal mortgage. Besides, the Canadian people bear the default risk since CMHC is a crown corporation.

### CMHC First-Time Home Buyer Incentive Compared to the UK, New Zealand, and Australian Schemes

The First-Time Home Buyer Incentive is a shared-equity mortgage with the Government of Canada (CMHC, 2021). It offers 5% of the purchase of an existing home and 10% of a newly constructed home. This incentive means that borrower does not have to save as much of a down payment to afford the expenses associated with the mortgage. The homebuyer must repay the incentive after 25 years, or when the property is sold, whichever comes first.

The UK equity loan,<sup>xvii</sup> the New Zealand first home partner,<sup>xviii</sup> and the Australian shared home ownership<sup>xix</sup> also replicate the Canadian First-Time Home Buyer Incentive.

### Home buyers' amount

Through this scheme, first-time home buyers can claim \$5,000 for the purchase of a qualifying home on their income tax returns (Government of Canada, 2021). First home grant schemes in New Zealand<sup>xx</sup> and Australia<sup>xxi</sup> are also extremely similar to the Canadian Home buyers' amount.

Likewise, the UK government provides other schemes to foster access to home property. These are Stamp Duty exemptions, Shared Ownerships and First Homes.

### Home buyers' plan

The Home Buyers' Plan (HBP) is a program that allows borrowers to withdraw from their registered retirement savings plans (RRSPs) to buy or build a qualifying home for themselves or for a related person with a disability (Government of Canada, 2021). The HBP withdrawal limit is \$35,000.

### From "Right to Buy" to "Help to Buy": A controversial issue for the Bank of England

The UK Conservative Party's discourse associates home property with individual progress and family values. Thus, this ideology has been materialized through the "Help to Buy" schemes that remind the "Right to Buy" policy of Margaret Thatcher. The UK Conservative Government implemented Help to Buy schemes in 2013 to get around the restrictions of Basel III that were about to be implemented through European Union regulation.<sup>xxii</sup> The Chancellor of the Exchequer, George Osborne, described Help to Buy in 2013 as "the biggest government intervention in the housing market since the Right to Buy scheme" of the 1980s.

Help to Buy schemes are a fundamental issue for the Conservative Party.<sup>xxiii</sup> Nevertheless, the outgoing governor of the Bank of England, Sir Mervyn King, issued a warning about Help to Buy in 2013 (BBC, 2013). Sir Mervyn was concerned that "should Help to Buy scheme become permanent, it could leave taxpayers exposed to billions of pounds in private mortgage debt for years to come."

Sir Mervyn also said: "I'm sure that there is no place in the long run for a scheme of this kind... This scheme is a little too close for comfort to a general scheme to guarantee mortgages." He added: "So, we mustn't let this scheme turn into a permanent scheme... When is the right time to terminate, it will depend on economic conditions at the time?" For its part, the Treasury Select Committee warned that the government would come under "immense" pressure to extend the scheme beyond the three years approved. Indeed, the Help to Buy schemes are still in force and have become a crucial issue in the Conservatives' discourse. Thus, the government has awarded 681,000 grants to households to purchase a home since 2010 through the Help to Buy scheme (HM Treasury, 2021).

### The USA

The US government does not provide public grants for down payments of mortgages. For instance, the US Federal National Mortgage Association (Fannie Mae) and the US Federal Home Loan Mortgage Corporation (Freddie Mac) can only approve loans up to 80% LTV ratio since Basel III.

In the USA, only private insurance companies can provide mortgage insurance to allow people to qualify for a loan that they would otherwise not be able to get. Thus, the bank receives the 20% LTV down payment and the home's buyer must make mortgage and insurance payments, but the insurance only protects the lender. When the buyer puts at least 20% down, private mortgage insurance is not required with a conventional loan.

### **Evolution of Household Debt After the Implementation of Basel III**

Household debt is just the combination of the debts of all people in a household. Mortgage loans make up the most significant component of household debt (OECD, 2016). According to the IMF:

In the short term, an increase in the ratio of household debt is likely to boost economic growth and employment. But in three to five years, those effects are reversed. Growth is weaker than it would have been otherwise, and the odds of a financial crisis increase. (Valckx, 2017)

The household debt expansion comes from policies that transformed housing into a commodity for the market forces profit. Up to the Margaret Thatcher and Ronald Reagan governments, the level of household debt remained low across the world. These policies have dramatically increased household debt since 1980. In Canada, household debt amounted to 46% GDP in 1980 and 101% in 2019. It represented 30% of UK GDP in 1980 but it reached 96% in 2009. The trend in the USA is similar: household debt amounted 50% GDP in 1980 but it increased up to 99% in 2007. This pattern of household debt has also spread across many Western countries since 1980 (IMF, 2021).

At any rate, there was deep concern about high household debt levels in Western countries in the aftermath of the GFC. Thus, one of the main aims of Basel III was to lower household debt by establishing stricter conditions for mortgages (IMF, 2021).

However, some countries opted for getting around the Basel III constraints. This section analyzes the relation between the imposition of 20% LTV down payments and levels of household debt.

### Commonwealth Countries That Get Around Basel III Requirements: Canada, Australia, the United Kingdom, and New Zealand

Household debt is very high in these countries: in 2020, it was 112% GDP in Canada; Australia 124%; New Zealand 98%; and the United Kingdom 90% (IMF, 2022). In 2013 household debt was 93% in Canada; Australia 112%; New Zealand 88%; and the United Kingdom 87%. Thus, household debt has dramatically increased since Basel III implementation in 2013, especially in Canada (+19%), Australia (+12%) and New Zealand (+10%). The UK has slightly increased household debt (+3%), although this country had schemes to guarantee mortgages before Basel III implementation.

The trend in Canada is particularly worrying. From 2019 to 2020, household debt increased by 9.38% GDP. This was the fourth-largest increase worldwide (behind Thailand, Iceland and Norway). During the years that preceded the burst of the housing bubble in the USA (2000–2007), household debt never increased more than 6% GDP in one year (IMF, 2022).

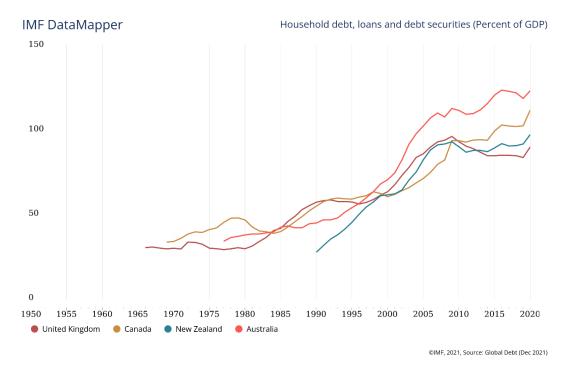


Figure 1: Household Debt: Evolution in Canada, the UK, New Zealand, and Australia

#### Countries hardest hit by the GFC: the USA, Spain, and Ireland (IMF, 2022)

The household debt level is 80% GDP in the USA; Spain 63%; and Ireland 35%. In 2013 household debt was 82% in the USA; Spain 78%; and Ireland 93%. Thus, household debt has dropped in these countries since the Basel III implementation in 2013: -2% in the USA; Spain -15% and Ireland -58%. The decline of household debt is even more significant if we compare the current household debt of these countries with the household debt of 2007. As we can see below, the household debt trend since 2013 is contrary to the Canadian household debt trend.

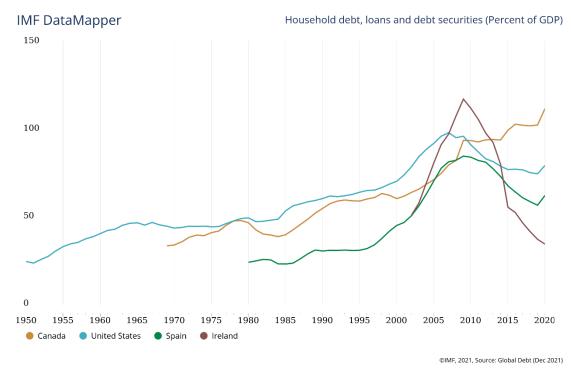


Figure 2: Household Debt: Evolution in Canada, the USA, Spain, and Ireland

# Countries That Had Established 20% Down Payments Before Basel III: Germany, Austria, and France (IMF, 2022)

The household debt level is 58% GDP in Germany; Austria 53%; and France 68%. In 2013 household debt was 56% in Germany; Austria 51%; and France 56%. Thus, household debt has maintained its levels in Austria and Germany and it has grown in France (12%), but remains at moderate levels. Therefore, the minimum 20% LTV down payment worked in these countries to maintain household debt at prudent levels.

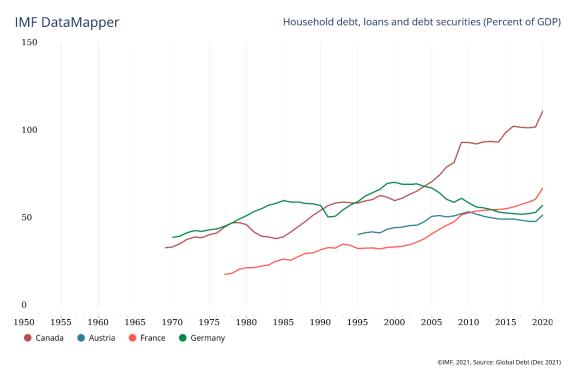


Figure 3: Household Debt: Evolution in Canada, Austria, France, and Germany

## Nordic Countries with High Levels of Household Debt: the Netherlands and Denmark (IMF, 2022)

The household debt level is 104% GDP in the Netherlands and 112% in Denmark. In 2013, household debt was 117% GDP in the Netherlands and 126% in Denmark. Thus, household debt has dropped consistently in both countries since Basel III. Therefore, the household debt trend since 2013 is contrary to Canadian household debt trends.

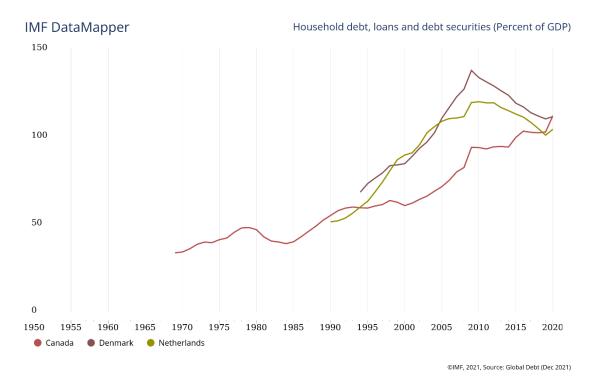


Figure 4: Household Debt: Evolution in Canada, the Netherlands, and Denmark

### Implications of High Levels of Household Debt in Canada

Young families and immigrant families have the highest relative debt levels in Canada (Walks, 2014). People born in Canada have 60% lower odds of having a high total debt service ratio compared to immigrants (Hurst, 2011).<sup>xxiv</sup> Among family types, lone-parent families with children had the highest debt-to-income ratio. Lone parent families had a debt-to-income ratio of 227% compared to 170% for couple families with children (Hurst, 2011).

The distribution of household debt is regressive (Walks, 2013). Urban growth has thus brought significant new vulnerabilities, mainly related to housing costs and large mortgages, and this is particularly evident within Canada's global cities (Hurst, 2011).

### Housing Cost Overburden Among Low-Income Homeowners with a Mortgage (OECD, 2019)

The provision of mortgages without a significant down payment also involves the increase of the percentage of housing cost overburden among low-income homeowners with a mortgage.

Thus, New Zealand is the country in the world with the greatest housing cost overburden among low-income homeowners with a mortgage (42%); Canada is the third in the world (41%); and the UK is the tenth (31%) (OECD, 2019). On the opposite end, the countries that had established 20% down payments before Basel III present moderate levels of housing cost overburden among low-income homeowners with a mortgage: Germany 21%, Austria 16% and France 14%.

## Main Agents in the Financialization of Housing

Private-equity firms have penetrated the housing market as corporate landlords. The following scheme explains the role of the main actors:

Central banks, especially the Federal Reserve, can create money through different mechanisms. Then, commercial banks can borrow loans at a low interest rate from them. Private equity firms accumulate capital in investment funds based in tax havens such as the Cayman Islands or Bermuda. This capital mainly comes from pension funds, sovereign wealth funds, and high-net worth individuals. The usual maturity of these investments is five years. Along with the private equity firm's own resources, this is the capital ready to be invested. Once the money in the investment fund is collected, the private equity managers identify a target frequently related to basic needs, such as housing.

Finally, commercial banks lend a significant part of the purchase value targeted to private equity firms with an average maturity of five years. Thus, thanks to leverage, private equity managers can invest at very high levels.

### **Shadow Banking Entities**

Private-equity firms adopt different legal forms. For instance, Cerberus is a limited partnership and Blackstone is a publicly traded partnership. However, their way of operating is similar. Firstly, these corporations create investment funds in tax havens to accumulate capital. Although these companies are headquartered in global cities such as London, Toronto, or New York, they channel their investments through jurisdictions that provide anonymity and exclude tax duties and accountability (Sassen, 2012). Thus, there is neither public nor private control of these shadow banking funds. The shadow banking sector, largely linked to global hedge funds and US financial firms, entered the Canadian market mostly after 2001 and began offering interest-only and subprime mortgage loans (Walks, 2014).

Private-equity firms collect money from financial intermediaries, pension funds, sovereign funds, and high-net worth individuals, which all invest vast amounts of money in these investment funds in return for a higher interest rate than the standard market. The investors do not have information about the funds' actual targets. Therefore, the private equity firm's managers can invest it wherever they consider it appropriate. An investment fund is not a legal person, and solely the private equity firm can act on behalf of the fund.

As stated above, private equity firms have targeted the housing market as the best niche market to yield significant profits. Blackstone announced in 2020 the final close of the largest ever dedicated European Real Estate fund (Blackstone, 2020). In the same way, BlackRock is the main shareholder in Vonovia, the biggest landlord in Germany, owning around 400,000 homes (Vonovia, 2021).

### **Pension funds**

Pension funds are financial intermediaries that offer social insurance by providing income to the insured persons following their retirement.

The management of pensions is mostly private in the USA and in other countries, such as the Netherlands, where the state just guarantees a basic pension. Therefore, the US pension funds have a huge capital to invest. The value of US pension fund assets was equivalent to around 140% of US GDP in 2019; its value in Canada was 160% GDP (OECD, 2020); 122% in the UK; and 200% in the Netherlands, but just 25% GDP in the euro area (European Central Bank, 2020), due to public social security pensions being more prevalent in nearly all euro area countries.

Pension funds also play a determinant role in financial markets as institutional investors (European Central Bank, 2020). For instance, pension funds managers tend to invest in private equity firms (European Central Bank, 2020). Thus, pension funds are the main funders of the private equity firms' investment funds.

### **Individual Investors**

High-net worth individual investors also play an important role as investors in private equity firms' funds due to the recent wealth accumulation. According to the former governor of the Bank of Canada and the Bank of England, Mark Carney, the proportion of wealth held by the richest top 1% of Americans increased from 25% in 1990 to 40% in 2012 (Carney, 2016). In Canada, this proportion was 25% in 2021 (World Inequality Database, 2021).

On the other hand, shadow banking provides anonymity to individual investors, since there is no public control in tax havens. Furthermore, the private equity firm's managers are not responsible for investigating the origin of the money. Since custodian banks are usually the intermediary closest to the end investor, they must run the checks on the end investor's identity and the source of their money. Thus, custodian banks are responsible for the due diligence of the legal origin of the funds (Knobel, 2019).

However, custodian banks often fail to conduct it properly since they have negative incentives. First, they can lose an investor if they discover the illegal origin of the money and second, they have to provide the necessary resources to conduct the investigations (Knobel, 2019). Thus, the collaboration of the biggest commercial banks in money laundering has been frequent. Some of the main banks have committed money laundering crimes. This has been the case of Credit Suisse (Prentice et al. 2019), Deutsche Bank (Woodman, 2021) and HSBC, condemned for money laundering in connection with the Mexican and Colombian drug trade (United States Senate, 2012).

### **Sovereign Wealth Funds**

States with a high surplus in the balance of payments usually create sovereign wealth funds, because their central banks accumulate a considerable amount of dollars. For instance, the origin of the Chinese sovereign fund is the exportation of consumer goods. Chinese exporters must exchange their dollars for the local currency, the renminbi, in the Chinese central bank, which accumulates an astonishing amount of dollars through this process.

Likewise, the great oil and gas exporters accumulate an enormous number of US dollars, since they trade those commodities in that currency. Therefore, Norway, Kuwait, United Arab Emirates, Saudi Arabia, and Qatar manage huge sovereign funds (Sovereign Wealth Fund Institute, 2021).

The managers of sovereign funds invest in different assets to obtain a return. Thus, they invest in real estate, financial assets, and investment funds.

Some public pension funds work in a similar way to sovereign wealth funds. For instance, the Canada Pension Plan Investment Board, operating as CPP Investments, is an active investor in real estate worldwide. It has made heavy investment in <u>distressed property</u> in Spain by purchasing important portfolios of <u>non-performing loans (NPLs)</u> (Zuloaga, 2018; El Confidencial, 2020).

### **Commercial Banks**

Banks have played a crucial role in the housing market as lenders and as sellers, since banks had to sell their distressed real estate properties after GFC. Basel III established that <u>NPLs</u> have a risk weight of 150% under its standardized method. Thus, Basel III has forced banks to sell NPLs to meet capital requirements, which meant that, private equity firms and individuals acquired hundreds of thousands of homes during the last decade.

As described above, banks also play a crucial role as mortgage lenders and as leading funders of private equity firms. Commercial banks lend a significant part of the purchasing value to private equity firms with an average maturity of five years. Banks usually fund 80% of the purchasing in opportunistic investments because of Basel III constraints.

However, long-run investments have a lower level of leverage. For instance, on November 2, 2020, Starlight Investments and KingSett Capital completed the \$4.9 billion acquisition of Northview Apartment REIT, with Canadian Imperial Bank of Commerce (CIBC) acting as sole underwriter in the \$2.4 billion financing. This is the largest multi-residential transaction in Canadian history (McCarthy Tetrault, 2020).

### **Investment Strategies**

Corporate landlords have various strategies for different types of properties (August, 2020). Those strategies can be classified as core, value add, and <u>opportunistic</u>, depending on the typology of the property. The location, the concentration of units within the same condominium building, and the home's quality are the most relevant factors to classify a property.

As said above, opportunistic investments are operations for the short run with a standard term of five years. However, value add and especially core investments can be designed for the medium-term or long-term.

### **Opportunistic Investments**

Private-equity firms make opportunistic investments in <u>distressed</u> properties. In the aftermath of the GFC in Ireland, Spain, and the US, banks had to sell millions of real estate assets mainly because of the Basel III requirements. Although governments had bailed out those commercial banks, later they privatized the real estate assets. Furthermore, banks had to rid themselves of huge real estate portfolios. Thus, private equity firms had an excellent opportunity for generating business.

As said above, private equity firms leverage their opportunistic operations. This way, they collect the enormous amount of money required to purchase such real estate portfolios. These corporations typically borrowed 80% of the transactions from commercial banks. Furthermore, they also borrowed around 13% of the transaction value from the investment funds they created, meaning only around 7% came from their own resources (Gabarre, 2021). Since the loans had an average maturity of five years, private equity managers must sell the assets within that period to pay off the loans.

These portfolios are usually scattered, since they come from foreclosed homes, land, and nonperforming loans to real estate developers. Thus, those kinds of assets are not appropriate for renting, since their management could be chaotic. Opportunistic funds purchased those assets at a very low price to sell them in packages to smaller corporate landlords or to individuals in the housing market.

Opportunistic funds such as Blackstone, Lone Star, Apollo, Cerberus, Texas Pacific Group, and Fortress have done a lot of business in the countries most affected by the GFC (Gabarre, 2021; Alderman, 2016).

### Value-Add Investments

Value-add investors target properties with a greater potential profit. The revaluation may come from the tourism potential of the property or <u>gentrification</u>. Thus, some corporate landlords invest in these kinds of properties. Their business plan consists in substituting the current tenants for new tenants with higher incomes or renting the property by means of tourism platforms, such as Airbnb.

Although Blackstone has mainly operated as an opportunistic investor, its motto "Buy it, fix it, sell it" refers to value-add investments. In this regard, Denmark has recently enacted a law known as the "Blackstone intervention" to curb rent increases and speculation on private housing based in value-add strategies. Denmark has adopted the following measures since July 1, 2020 (Schwarz-Hansen, 2020):

- The rent for renovated units must not deviate from the value of the tenancy. Rent tribunals or the courts establish the value according to comparable tenancies. If the rent exceeds the value of the tenancy, the tenant can claim a rent reduction.
- It is prohibited to offer money or other benefits to terminate a tenancy agreement.
- A housing investor can only increase the rent in rental apartments after renovation after five years of ownership.

### **Core Investments**

The primary commitment of pension funds is to pay the retirement pensions of their affiliates. Therefore, their managers usually look for safe investments that generate reliable cash flow. Thus, pension funds target core real estate assets, which are stable, and well-maintained assets that generate reliable cash flow (August, 2020).

BlackRock, the world's largest asset manager, says the following about pension funds:

We understand the challenges that public pensions face. With interest rates down and market volatility up, many plans are struggling to achieve their long-term target rates of return while maintaining sufficient liquidity to meet annual outflows. To help, we offer a full range of investment strategies across public and private markets. (BlackRock, 2021)

Thus, BlackRock does not make opportunistic or value-add investments. BlackRock invests in corporate landlords whose properties are located in stable socioeconomic environments for real estate. Therefore, BlackRock has not invested in the peripheral countries of the European Union. BlackRock is the main shareholder in Vonovia, the biggest landlord in Germany, owning around 400,000 homes (BlackRock, 2021).

In this sense, <u>Real Estate Investment Trusts (REITs</u>) offer good opportunities for stable investments in the long run. Although the portfolio of a REIT can be composed of opportunistic and value-add properties, a REIT's portfolio is generally composed of properties located in safe socio-economic environments usually within a building or an area.

At any rate, operating a real estate asset does not require any particular legal vehicle since it is a conventional business. So, the purpose of creating a specific law for REITs is to grant tax advantages to the finance industry. To this end, the finance industry has successfully lobbied for the exemption of corporate income tax for REITs in nearly 40 countries, including Canada.

The finance sector created territorial associations to gain political influence. NAREIT has led the US REIT industry for nearly 60 years, and it is the voice for the REIT industry among US policy-makers (NAREIT, 2021).

REALpac members include 124 of the largest real estate companies in Canada. The aim of REALpac is to influence public policy with regard to housing issues, such as property tax, REIT issues, capital markets, taxation, multi-family rent controls, bankruptcy, and insurance (REALpac, 2021).

Transnational companies and European financiers created the European Public Real Estate Association (EPRA) in 1999. EPRA membership covers the most powerful property companies, accountants, investment banks, asset managers and insurance companies (EPRA, 2021). According to NAREIT, REITs of all types collectively own around \$3.5 trillion in gross assets across the US (NAREIT, 2021), and according to EPRA, European members represent over €670 billion of real estate assets (EPRA, 2020).

NAREIT, REALpac and EPRA have lobbied worldwide to persuade governments to legislate REITs and grant them fiscal advantages (Hernández Vigueras, 2012). For instance, in 2020, REALpac successfully lobbied to defeat the proposed development charges exemptions in Toronto and advocated against evictions moratoriums (REALpac, 2020). <sup>xxv</sup> Nevertheless, national laws governing evictions must be compliant with human rights norms, including the principle of respect for human dignity. Forced evictions have long been recognized as a gross violation of human rights. In instances of mortgage foreclosure or rent arrears, evictions should only occur as a last resort and after a full exploration of alternative means to resolve outstanding debt, such as through emergency housing benefits, debt rescheduling or, if required, relocation to more affordable housing units meeting adequacy standards (Farha, 2018).

Globally, REITs channel investments because of tax privileges. Furthermore, while purchasing a home requires tedious bureaucratic processes, the shares of REITs are able to be traded instantly. Thus, both individuals and financiers can bet on the housing market.

# The Impact of the National Housing Regulations on the Human Right to Adequate Housing

Countries with comparable economic and cultural backgrounds have substantial differences when it comes to housing. Thus, protection tends to be stronger in the countries that put the human right to housing before housing property. This section compares the housing system of Canada with the housing system of UK, France, Germany, Denmark, the Netherlands, and Austria in terms of REITs regulation, rent regulation, <u>social housing</u> and housing affordability.

# Real Estate Investment Trusts (REITs) Regulation: Comparison Between the USA, Canada, the UK, France, Germany, Denmark, and Austria

The regulation of REITs is relatively uniform in many ways. Almost all the countries that had enacted REIT regulations have exempted these entities from corporate income tax or its equivalent national tax. As said above, tax exemptions are the *raison d'être* of REITs. When a country has legally implemented REITs without fiscal benefits, neither legal entities nor private individuals have created companies within this legal model, as is the case in Spain and Finland. Nevertheless, they have widely established a withholding tax for foreign investors. At the same time, fiscal authorities subject personal dividends from REITs to personal income tax, and they also subject the corporate investor's dividends from REITs to corporate income tax.

However, there are substantial differences in some important requirements, such as the minimum number of investors and the share of capital and voting rights held by small investors (PWC, 2021).<sup>xxvi</sup> For their part, Denmark and Austria have not introduced REIT regimes.

COUNTRY	<b>REIT REGIME</b>	CORPORATE TAX	REQUIREMENTS	Publicly listed REITs	Capitalization
			Close end funds must be listed in a stock exchange (not open end funds). At least 150		
CANADA	YES (1993)	EXEMPTED	shareholders	50	CA \$ 75 billion
USA	YES (1960)	EXEMPTED	At least 100 shareholders, but not minimum value for each shareholder	225 (1,100 total)	US \$3.5 trillion (total)
			Admission to trading on a recognised stock exchange. A REIT cannot be close unless at		
UK	YES (2007)	EXEMPTED	least 35% of the shares are free float	50	US \$ 70 billion
			At least 15% of the share capital must be held by investors who individually own less than		
			2% of the capital. An investor cannot hold more than 60% of the shares of the parent		
FRANCE	YES (2003)	EXEMPTED	company	27	EUR€74 billion
			REITs must be listed in a stock market. At least 15% of the share capital must be hold by		
			investors who individually own less than 3% of the capital. An investor cannot held more		
GERMANY	YES (2007)	EXEMPTED	than 8,5% directly	* 6	EUR€4,3 billion
DENMARK	NO				
AUSTRIA	NO				

Figure 5: REIT Regimes in Canada, the USA, the UK, France, Germany, Denmark, and Austria

### Rent Regulation: Canada, the UK, France, Germany, Denmark, and Austria

Rent control, or rent regulation, is a government policy that limits the amount a landlord can ask a tenant to pay when renting a home or renewing a lease (CERA, 2021). Rent regulation depends on the housing system of every country. Thus, countries with a high percentage of tenants such as Germany, Switzerland, and Austria have implemented stringent rent controls (Molina, 2017). However, the controls are traditionally weaker in Commonwealth countries, such as Canada, that have committed to a model based on home ownership, and especially in the UK, where rent control disappeared during Margaret Thatcher's governments. Here is a short overview of rent regulation in the Canadian provinces and territories, the UK, France, Germany, Denmark, and Austria. This section also includes an <u>appendix</u> in table format for ease of comparison (Molina, 2017).

All European countries regulate rent control at a national level (Molina, 2017). However, Catalonia has recently enacted a law on rent control, but the Spanish Constitutional Court still have to decide if the Spanish parliament has exclusive competence on this issue (Europa Press, 2021).

### Canada

In Canada, where close to 68% of households own their home, rent control policies fall under provincial-territorial jurisdictions.

Alberta, Newfoundland and Labrador, the Northwest Territories, Nova Scotia, Nunavut, Saskatchewan and Yukon do not limit the amount by which a landlord can increase rent (CERA, 2021).

British Columbia, Manitoba, New Brunswick, Ontario, Prince Edward Island, and Quebec restrict increases to a specific percentage of current rent. In Ontario, for occupied suites, rents can only be raised annually by a guideline amount (in 2018, it was 1.8%) (August, 2020). In Manitoba, buildings built or occupied after March 7, 2005, are exempt from rent control for 20 years (CERA, 2021).

In Manitoba, the rental increase guideline is 1.6% in 2021 (Cooke, 2021). The Prince Edward Island Regulatory and Appeals Commission decides rent increases (1% for 2021). In Quebec, rent increases are tied to inflation and repairs to the building. In cases where the tenant doesn't agree with the increase, the landlord must file an application through a tribunal (Cooke, 2021). In New Brunswick, landlords can only increase rent relative to what is reasonably charged for comparable units in the area (CERA, 2021).

All Canadian provinces except Prince Edward Island and Manitoba have <u>vacancy decontrol</u>. Manitoba puts a gross cap on the rent amount that can be charged to a new tenant, rather than keeping it at the same amount offered to the previous tenant. The new rent amount cannot be more than the average currently charged for comparable units in the residential complex (CERA, 2021). In 1997, Ontario passed the Tenant Protection Act, which allowed rent increases of any amount upon turnover. In strong markets, this incentivized landlords to remove existing tenants and raise rents on the vacated suites (August, 2020).

### Germany

In Germany the percentage of home ownership is 51% (Eurostat, 2019), which contributes to rent regulation (Molina, 2017).

Thus, the law caps rents in regions with a strained housing market. At the starting point of the contract, the rent cannot be higher than 10% average of the rent level. To enforce this, cities create a database of local reference prices (Molina, 2017).

Furthermore, tenants receive unlimited duration of their rental agreement as long as they comply with the terms of the contract. Landlords can only establish limited rental agreements in some cases established by law. Thus, the contract can either establish a fixed incremental increase of the rent every year or an increase based on the consumer price index.

### Austria

In Austria the percentage of home ownership is 55%. There are three schemes of rent stabilization, which operate according to the home's classification. There are four categories for homes (A, B, C, D) (Molina, 2017).

- Adequate Austrian rent: this system controls rents in the free market. A rent control board fixes the rent after a valuation. Newly built properties, singular buildings, and the highest status homes (A and B) are subject to this control.
- Austrian rent by categories: the government establishes a maximum price per square metre. Rents agreed between 1982 and 1994 are subject to this control.
- The standard value rent: the national government establishes a standard rent and every state of Austria fixes a base rent per square metre. The rent is determined according to some objective characteristics of the home (location, furniture, maintenance condition, size). Rents agreed after 1994 are subject to this control, except when the adequate Austrian rent is applicable (*ibid.*).

Tenants receive unlimited duration of their rental agreement, similar to the German law.

### Denmark

In Denmark the percentage of home ownership is 61%.

The rent market is controlled. Rents in all dwellings built before 1992 are subject to a cost-based rent control, which is calculated as follows: the landlord gathers all the costs incurred in the day-to-day operation and the maintenance of the building and add 7% interest on the costs of the investment (Munch et al., 2015). Homes built after 1992 are subject to rent control boards. There is a rent control board in every city which decides the rent-level, maintenance issues, and rent increases (Rent Guide IVS, 2018).

Tenants also receive unlimited duration of their rental agreement. Limited rental agreements can only be established in some cases.

### France

In France the percentage of home ownership is 64% (Molina, 2017).

In 2014, France passed the law ALUR to control rents at the starting point of the contracts and rent increases. Homes located in strained areas are subject to this law (70% of rented homes are in strained areas). ALUR establishes a maximum rent, so as the rent cannot be more than 20% higher than the established rent average set by the observatory of rents. It also establishes a minimum rent, which is 70% of the average (Molina, 2017).

The minimum term of the rent contract is one year for furbished accommodation. However, the minimum term is three years when it is a non-furbished accommodation and the landlord is an individual, and six years when the landlord is a corporation (Molina, 2017).

### United Kingdom (England and Wales)

In the UK, the percentage of home ownership is 65%.

The Housing Act of 1980 introduced Assured Shorthold Tenancies that ended strong rent controls. Thus, tenant protection lasts for only six months from the beginning of the first tenancy. The landlord can ask the tenant to pay a higher rent, then evict them and find new tenants if they refuse.

# Social Housing Projects and Housing Cost Overburden Rate: Canada, the UK, France, Germany, Denmark, Austria (Vienna), and the Netherlands

The wave of privatization initiated in the 1980s reached most countries. Thus, there were significant sales of <u>public housing</u> in the 1990s in most OECD countries that had high levels of public housing, with some exceptions, such as France and Austria. However, this trend finished in 2010. Although public housing has not significantly increased, most governments have maintained its levels since then (OECD, 2021).

<u>Social housing</u> has a strong impact on housing affordability. The right to housing includes affordability, security of tenure, availability of services, habitability, accessibility, appropriate location, and cultural adequacy (Farha, 2018).

This section analyzes the housing systems of several countries in comparison to Canada, especially in terms of social housing and affordability.

### Canada

Non-profit and social rentals comprise only 6% of housing, built in a short postwar burst (August, 2020). The Canadian government led the way in the financing of social housing (Tranjan, 2021). In 1972, they built 32,000 social housing units, representing 20% of total housing unit completions (Walks et al., 2015). The government restructured and cancelled social housing programs from 1984 to 1992. By the late 1990s, the government devolved social housing responsibility to the provinces, some of whom downloaded responsibility further onto municipalities (Tranjan, 2021). In the nine years spanning 2002 to 2010, roughly 13,000 new social or nonprofit rental units were built across Canada (mostly on reserves, and in the province of Quebec where the provincial government remained active). Social housing units represented less than 1% of total housing unit completions from 2008 to 2010 (Walks et al., 2015).

Thus, the Canadian state has increasingly relied on the triumvirate of securitization, credit growth, and rising home ownership as the basis for an asset-based approach to housing policy, and moved away from the direct funding of purpose-built, subsidized social-rental housing (Walks et al., 2015). The number of housing markets that have become severely unaffordable in Canada has grown steadily since 2004. Housing affordability has deteriorated the equivalent of

six years of annual household incomes in Toronto, and between two and three years in Montréal and Ottawa-Gatineau (Demographia, 2021).

Canada has a high <u>housing cost overburden rate</u> for tenants in the private market (15%) (OECD, 2021). Canada's metropolitan areas went from having some of the most affordable housing markets on the globe to the least affordable between the late 1990s and the late 2000s (Walks, 2014), with Vancouver representing the least affordable city among the Anglo American nations in 2021 (Demographia, 2021). In 2016, 12.7% of Canadian households were in <u>core housing need</u> (Statistics Canada, 2016).

### United Kingdom (England and Wales)

In postwar Britain, the Labour Party created a comprehensive welfare state that guaranteed the protection of the rights recognized in the Universal Declaration of Human Rights of 1948. Thus, the government began the National Health Service, free secondary school education became a right for the first time, and the administration responded to the housing shortage through ambitious public housing projects, known as council housing in the UK. The Minister of Health, Labour, and National Service, Aneurin Bevan, declared that council housing projects should fill the needs of a wide range of members of society creating "the living tapestry of a mixed community." In this sense, he said that "We should try to introduce in our modern towns and villages what was always the lovely feature of English and Welsh villages, where the doctor, the grocer, the butcher and the farm labourer all lived in the same street" (Bevan, 1949).

Although the Conservatives conceived public housing solely for working-class people, thanks to progressive taxation, the development of public housing lasted for the whole postwar period (1945–1979). The government built 5 million homes between 1946 and 1981. In 1977 public housing amounted to 32% of the housing stock in England. However, the Margaret Thatcher neoliberal era drastically changed the housing landscape. In 1981, the conservatives introduced the "Right to Buy," which entitled council tenants to purchase their homes. Many council tenants took advantage of it by buying their homes at a generous discount and the public sector sold 2.6 million council houses in the UK (Wheeler, 2015).

The privatization of public housing was one of the defining policies of the Thatcher era. Since many tenants were traditional Labour voters, the "Right to Buy" changed the framework of British policy. Then-Prime Minister Margaret Thatcher said it would pave the way for a "propertyowning democracy" (Homer, 2019). Home ownership increased from 55% in 1981 to 67% a decade later and the percentage of homes provided by councils fell to 9% in Great Britain (McMullan et al., 2021). The government has built just 250,000 homes since 1981. This housing policy based on property has involved the financialization of housing in the UK, since most people need credit to buy a home. The result is that house prices are now around three times as expensive as they were in the late 1970s (Bank of England, 2015). However, the "Right to Buy" is still in force, and council tenants in England can buy their rented home with a discount of up to £84,600. Through indebtedness, access to home property is a priority issue for the Conservative Government. Thus, in 2013 the UK implemented "Help to Buy" programs. Since the 1980s the role of non-profit housing associations has become dominant. The Housing Act of 1980 facilitated the transfer of council housing to not-for-profit housing associations. Thus, social housing in the UK represents 17% of the housing stock.

Finally, the percentage of the population living in households where total housing costs represent more than 40% of disposable income was 15.1% in 2018 (Eurostat, 2021).

### Austria (Vienna)

The city of Vienna has been an example of ambitious policies in housing since one hundred years ago (Gabarre, 2021). Nowadays, the city council owns 220,000 apartments. Limited-profit housing associations manage 200,000 apartments more and even the major part of the owner-occupied houses has been built under the subsidized housing program. Thus, 62% of Vienna residents live in social housing. The law only permits unlimited contracts in social housing.

City housing aims at a wide range of social backgrounds to prevent the creation of ghettos and housing cost overburden.

Twenty-four percent of housing in Austria is social housing.

The percentage of the Austrian population living in households where total housing costs represent more than 40% of disposable income was 6.8% in 2018 and 7% in 2020 (Eurostat, 2021).

#### Germany

Germany has a low level of social housing. It only represents about 5% of the national housing stock (Housing Europe, 2010).

The German landscape of housing drastically changed in 1989, since housing companies had a non-profit status up to that year. Then, the government privatized most public housing in the 1990s and the 2000s. The origin of the largest corporate landlords such as Vonovia and Deutsche Wohnen was the public housing of the German Democratic Republic and the housing assets of the German public corporations. Thus, three million homes owned by the German Democratic Republic were privatized in the 1990s (Molina, 2017).

The origin of Vonovia is the privatization of the housing assets of the national railway corporation and the national company of energy. The US private equity firm Fortress acquired those portfolios in 2004 through the company that preceded the creation of Vonovia. Likewise, the state of Berlin sold 60,000 homes to Cerberus and Goldman Sachs in 2004. Those homes were the source of the corporate landlord Deutsche Wohnen, which has recently merged with Vonovia. However, these policies caused social unrest in the long run. In 2021, 59% of Berliners voted to expropriate around 240,000 homes from large landlords in a referendum whose name was Expropriate Deutsche Wohnen & Co.

The percentage of the population living in households where total housing costs represent more than 40% of disposable income was 14.2% in 2018 and 19.9% in 2020 (Eurostat, 2021).

#### France

The percentage of social housing is around 17% of the housing stock (4.5 million homes) (Housing Europe, 2010). Thus, more than 40% of French renter households live in the public rental sector.

Habitation à Loyer Modéré (HLM) organizations provide social housing at moderate rents. These can be public organizations or private ones acting on a non-profit basis, and they are under the control of the Ministry of Housing and Finance.

In 2000 the French government enacted *La loi solidarité et renouvellement urbain* (the social solidarity and urban renewal act) which required municipalities to meet 25% public housing targets by 2025 (Ministère de la Transition Écologique, 2021). Although not all municipalities have complied, 1.8 million units of public housing have been built since then.

The percentage of the population living in households where total housing costs represent more than 40% of disposable income was 4.7% in 2018 and 5.5% in 2019 (Eurostat, 2021).

#### Denmark

The percentage of social housing is around 20% of the housing stock (Housing Europe, 2010).

Non-for-profit housing associations provide social housing at cost.

The percentage of the population living in households where the total housing costs represent more than 40% of disposable income was 14.7% in 2018 and 14.1% in 2020 (Eurostat, 2021).

#### The Netherlands

The Netherlands has the largest share of social housing in the world (32%, 2.4 million homes) which is 75% of the rental stock in the country (Housing Europe, 2010).

Social housing organizations are the providers of social housing. The government supervises these entities. Social housing had been open to virtually all citizens. However, in 2010 the European Commission issued a controversial decision that established that social housing should be available just to citizens with a limited income.

At any rate, social housing is still the largest housing sector in major cities like Amsterdam (40 percent) (Van Nes, 2020).

The percentage of the population living in households where the total housing costs represent more than 40% of disposable income was 9.4% in 2018 and 8.3% in 2019 (Eurostat, 2021).

### Other countries

Non-profit and social housing comprise only 4% of the housing stock in the US (OECD, 2021) and around 1% in Spain.

## Conclusion

The model of housing is a political decision that may shape society. Thus, countries with comparable economic and cultural backgrounds have housing systems that are extremely different in terms of indebtedness, property, social stratification, mobility, and urban planning.

Up to the financial crisis of 2008, most governments relied on mortgage indebtedness as a powerful economic driver. However, the aftermath of the crisis has witnessed the bailout of the entire global financial system. Therefore, the BIS established a new mortgage framework to avoid excessive household indebtedness. Nevertheless, the mortgage business is a major source of profit for the financial system due to the financialization of housing. Thus, some countries have opted to get around Basel III requirements for down payments.

It is possible to establish some categories of housing systems depending on several factors such as compliance with the spirit of Basel III, the existence of laws and regulations protecting tenants, and investment in social and public housing. The Commonwealth model of housing is based on property and indebtedness. The Government facilitates access to home ownership by granting public aid for mortgages and down payments. Since the home property is the target of such housing policies, there is little protection for tenants, and the public housing stock is either small or declining.

The advantage of this policy is in obtaining a home property. Once paid, the owner is free of further charges. Furthermore, property is marketable, transferable, and inheritable. Homeowners have access to low-cost credit and can borrow against their homes to finance other expenses, such as education. Last but not least, there are subjective or socio-cultural reasons why becoming an owner is central to the social expectations of many people.

Nevertheless, there are also essential shortcomings in basing the housing system on home ownership. For instance, high levels of household debt pose a risk to the economy, as proved in the financial crisis of 2008, whose origin was the massive granting of mortgages without sufficient guarantees. A high level of household debt also reduces the purchasing power of many households, which hinders the economic growth in the long run. It also exacerbates the social segregation of urban areas according to purchasing power. Furthermore, this model of housing creates cyclical housing price bubbles and financial pressure on broad sectors of society, which hinders the complete personal development of many people. Financialization has made adequate housing a central problem in every community that relied on home ownership through indebtedness as its urban model.

France and Austria are the countries that present the lowest levels of household debt and housing stress. The housing system of both countries takes a prudent line on granting mortgages and has adopted ambitious policies of either public or social housing guaranteeing human rights. However, social housing in France frequently led to social segregation and even ghettoization. Perhaps Vienna is the most successful housing system. This is the closest city to the Aneurin Bevan's aspiration of "the living tapestry of a mixed community." Thus, Vienna has managed to enable the right to housing and it did not lead to economic stagnation. Conversely, it has enhanced prosperity. Thus, many rankings and studies place Vienna among the best cities worldwide in the areas of infrastructure, housing, innovation, and culture.

## Appendix

*Rent regulation in the UK, France, Germany, Denmark, Austria and Canadian provinces and territories* 

Province, Ter- ritory or Country	Rent in- crease limits for ex- isting tenants	Rent in- crease limits for new tenants
Alberta	No	No
British Colum- bia	Yes	Yes
Manitoba	Yes	Yes
New Bruns- wick	Yes	No
Newfound- land	No	No
Northwest Territories	No	No
Nova Scotia	No	No
Nunavut	No	No
Ontario	Yes	No
Prince Edward Island	Yes	Yes
Quebec	Yes	No
Saskatchewan	No	No
Yukon	No	No
Germany	Yes	Yes
Austria	Yes	Yes
Denmark	Yes	Yes
France	Yes	Yes
UK	No	No

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## Glossary

**Collateralized Debt Obligation (CDO)**: The synthetic CDOs, and other synthetic derivatives (which derive their value from bets placed on the future values of other assets) might be considered the epitome of fictitious capital (McNally, 2009). A CDO is a type of securitized product backed by fixed-income assets (such as bonds, receivables on loans, or other debt) or derivatives of these fixed-income assets, structured in multiple classes or tranches with each class or tranche entitled to receive distributions of principal and/or interest in accordance with the requirements adopted for the specific class or tranche. A CDO includes, but is not limited to, a collateralized loan obligation (CLO) and a collateralized bond obligation (CBO) (Financial Industry Regulatory Authority, 2015).

**Core housing need**: A household in core housing need is one whose dwelling is considered unsuitable, inadequate, or unaffordable and whose income levels are such that they could not afford alternative suitable and adequate housing in their community (Statistics Canada, 2016).

**Derivatives:** Financial derivatives are defined as financial instruments whose price is determined by the value of another asset. The example below explains how derivative contracts work. Derivative contracts are often used for commodities when the buyer agrees to purchase the asset on a specific date at a particular price. For instance, an airline can hedge from fluctuating oil prices through a derivative. The airline can reach an agreement to purchase oil in twelve weeks' time at a fixed price. Financial investors can use this contract to speculate about the evolution of the price of oil. Furthermore, since the contract's seller does not have to own the underlying asset, the derivative industry is a significant source of speculation. There are many types of financial derivatives: swaps, forwards, and collateralized debt obligations (CDOs) and these were a substantial cause of the financial crisis.

Distressed properties: Refers to homes either under foreclosure or control of the bank.

**Fiat money**: Inconvertible paper money made legal tender by a government decree (Ox-ford).

**Financialization**: The financialization of rental housing refers to a process in which rental housing properties are transformed into a product for financial investment. In practice, this refers to the acquisition of multi-family rental buildings by financial firms that make it possible for investors to access an income stream derived from tenants' monthly rent payments. Investors can do this by investing privately or by purchasing shares on a stock exchange (August, 2020).

**Gentrification:** A process in which a poor area (of a city, for instance) experiences an influx of middle-class or wealthy people who renovate and rebuild homes and businesses and which often results in an increase in property values and the displacement of earlier, usually poorer residents (Merriam-Webster).

**Housing cost overburden rate**: Housing cost overburden rate measures the proportion of households that spend more than 40% of their disposable income on housing costs (OECD, 2021).

**Investment banks**: A financial services company that acts as an intermediary in financial transactions.

**Loan-to-value (LTV) ratio**: The amount of the loan divided by the value of the property. If a home has a value of \$1,000,000 and the mortgage loan has a value of \$800,000, the LTV ratio of this mortgage is 80%.

**Money supply**: The money supply is the total amount of money—cash, coins, and balances in bank accounts—in circulation (Federal Reserve, 2021).

**Mortgage-backed securities**: Mortgage-backed securities, called MBS, are bonds secured by a home and other real estate loans. They are created when a number of these loans, usually with similar characteristics, are pooled together. For instance, a bank offering home mortgages might round up \$10 million worth of such mortgages (Financial Industry Regulatory Authority, 2021).

**Non-performing loans**: When the borrower remains financially healthy and pays the agreed instalments and interest as scheduled, the loan is said to be performing. But there is always the risk that the company or individual will not be able to repay within the agreed timespan. If this happens or looks likely to happen, the bank must classify the loan as "non-performing." Non-performing loans are often called "bad loans" (ECB, 2021).

**Open market operations:** The purchase and sale of securities in the open market by a central bank—are a key tool used by the Federal Reserve in the implementation of monetary policy (Federal Reserve, 2021).

**Opportunistic investments**: Risky operations that potentially yield higher profits within a five-year term.

**Real economy:** The part of a country's economy that produces goods and services, rather than the part that consists of financial services such as banks, stock markets (Cambridge).

Public housing: A home owned by any public administration.

**Quantitative easing**: When a central bank purchases a predetermined and massive amount of financial assets during a predetermined period of time. On the one hand, central banks purchase financial assets from commercial banks to lower their yields. This is the purpose of buying government and corporate bonds. On the other hand, the aim of quantitative easing is to increase the money supply to boost credit in an economy. Once the bank sells an asset to the central bank, the bank can use the money received to grant new loans.

**Real estate investment trust (REIT):** A company that owns, operates, or finances incomeproducing real estate. The REITs operations embrace a wide range of real estate such as retail, medical facilities, or infrastructure, but their primary business focuses on apartments. The US created the legal category of REITs in 1960, and REITs have spread worldwide since then (Eurostat, 2020). The US Tax Reform Act of 1986 was crucial, since it allowed them to manage real estate, rather than merely owning or financing it.

Social housing: Non-profit or non-market housing, regardless of who is the owner.

Twin deficit: The persistent balance of payments and public budget deficit of the USA.

**Vacancy decontrol**: Vacancy decontrol means that when a tenant moves out of a rental unit, the landlord can set the new rent for the following tenant to any amount they choose (CERA, 2021).

# REFERENCES

- Agencias [No Author]. (2020, March). El banco Santander cierra la venta de una cartera de dudosos de 1,672 M a CPPIB. *El Confidencial*.
- Alderman, L. (2016, December). Wall Street Is Europe's Landlord. And Tenants Are Fighting Back. New York Times.
- Arnott, R. (2015). Housing Economics. Dans International Encyclopedia of the Social & Behavioural Sciences, 2nd ed. (pp. 239–245). Elsevier.
- August, M. (2020). The financialization of Canadian multi-family rental housing: From trailer to tower. *Journal of Urban Affairs*, 42:17, pp. 975–997.
- Bank for International Settlements. (s.d.). Calculation of RWA for credit risk. Eligible assets 20.34.
- Bank of Canada. (2021). Bank of Canada assets and liabilities: Weekly (formerly B2). https://www.bankofcanada.ca/rates/banking-and-financial-statistics/bank-of-canadaassets-and-liabilities-weekly-formerly-b2/
- Bank of England. (2015). How does the housing market affect the economy? : https://www.bankofengland.co.uk/knowledgebank/how-does-the-housing-marketaffect-the-economy
- BDO Canada. (2021). Top Personal Marginal Tax Rates: https://www.bdo.ca/enca/insights/tax/tax-facts/top-marginal-tax-rates/
- Bevan, A. (1949). Housing Bill. HC Deb, 16 March 1949, vol. 462 cc2121-231.

- BlackRock. (2021). Introduction to BlackRock: https://www.blackrock.com/sg/en/introductionto-blackrock
- BlackRock. (2021). Public Pensions: https://www.blackrock.com/institutions/en-us/ourclients/public-pensions
- Blackstone. (2020). Blackstone Real Estate Partners Europe IV announces €9.8 final close. https://www.blackstone.com/press-releases/article/blackstone-real-estate-partnerseurope-vi-announces-9-8-billion-final-close/
- Blackstone. (2021). Real Estate: https://www.blackstone.com/our-businesses/real-estate/
- BofA Global Research. (2020). Central bank balance sheet: https://graphics.reuters.com/HEALTHCORONAVIRUS/STIMULUS/dgkplxnxqpb/index.ht ml
- Bohoslavsky, J. P., Farha, L., Boly Barry, K., Sepúlveda Carmona, M., & Heller, L. (2020, October). Covid-19 has exposed the catastrophic impact of privatising vital services. *The Guardian*.
- British Broadcasting Corporation (BBC). [No Author]. (2013, May). Sir Mervyn King issues Help to Buy mortgage warning. *BBC*.
- Brown, J. (2022). The Financialization of Seniors Housing and Long-Term Care. Report for the Office of the Federal Housing Advocate.
- Buffet, W. (2002). Berkshire Hathaway Inc. Annual Report.
- Carney, M. (2016). *The spectre of monetarism*. Bank of England.
- Cecchetti, S., & Tucker, T. (2021). Understanding how central banks use their balance sheets: A critical categorisation. VOX EU.
- CERA. (2021). A look at rent control policies across Canada.
- Christensen, J. (Réalisateur). (2018). The Spider's Web [Film].
- CMHC. (2021). First-Time Home Buyer Incentive.
- CMHC. (2021). What is CMHC Mortgage Loan Insurance.
- Cooke, A. (2021). Nova Scotia housing crisis: Canadian jurisdiction with rent control weigh in. *Global News*.
- Cox, K. (2009). The question of hegemony and capital's global crisis. *Human Geography 2.2*, pp. 11–16.
- Dahiya, S., Kamrad, B., Valerio, P., & Siddique, A. R. (2019). The Greenspan Put. SSRN.
- Damgaard, J., Elkjaer, T., & Johannesen, N. (2019). What is real and what is not in the global FDI network? IMF.

- Eichengreen, B. (2011). *Exorbitant privilege: The rise and fall of the dollar*. Oxford University Press.
- Eichengreen, B. (2018). *The Lessons of Black Monday*. Project Syndicate: https://www.projectsyndicate.org/commentary/stock-market-lessons-of-black-monday-by-barryeichengreen-2018-02
- Eichengreen, B., Mehl, A., & Chitu, L. (2019). *How global currencies work. Past, present and future.* Princeton University Press.
- Europa Press. (2021, October). El TC admite el recurso del Gobierno contra la ley catalana de protección del derecho a la Vivienda.
- European Central Bank (ECB). (2020). New pension fund statistics.
- European Central Bank (ECB). (2020). Pension funds statistics.
- European Central Bank (ECB). (2021). Monetary Policy.
- European Central Bank (ECB). (2021). What are non-performing loans (NPLs)?
- European Parliament. (2019). European Parliament resolution of 26 March 2019 on financial crimes, tax evasion and tax avoidance.
- European Public Real Estate Association (EPRA). (2017). EPRA industry newsletter.
- European Public Real Estate Association (EPRA). (2020). EPRA annual report 2020. Epra CEO's report and financial statements.
- Eurostat. (2019). *House or flat—owning or renting.*
- Eurostat. (2020). Evolution of the housing market.
- Farha, L. (2014). Report of the Special Rapporteur on adequate housing as a component of the right to an adequate standard of living, and on the right to non-discrimination in this context. . United Nations.
- Farha, L. (2018a). Basic principles and guidelines on development-based evictions and displacement. Annex 1 of the report of the Special Rapporteur on adequate housing as a component of the right to an adequate standard of living. United Nations.
- Farha, L. (2018b). Basic principles and guidelines on development-based evictions and displacement. Annex 1 of the report of the Special Rapporteur on adequate housing as a component of the right to an adequate standard of living. United Nations General Assembly.
- Federal Reserve, Bank of Dallas. (2021). Fed's Mortgage-Backed Securities Purchases Sought Calm, Accommodation During Pandemic.

FINRA. (2015). Federal Reserve History. Banking Act of 1933 (Glass-Steagall).

FINRA. (2015). The Financial Industry Regulatory Authority Regulatory Notice. 15.04.

FINRA. (2021). Mortgage Backed Securities.

- Gabarre, M. (2019). Tocar fondo: la mano invisible detrás de la subida del alquiler. *Traficantes de Sueños*. .
- Gabarre, M. (2021). Cerberus hace la vida imposible a sus inquilinos en el sur de Madrid. Ctxt.
- Government of Canada. (2021). Home Buyers' amount.
- Government of Canada. (2021). State of Trade 2021: A closer look at foreign direct investment (FDI).
- Gowan, P. (1999). Global gamble: Washington's faustian bid for world dominance. Verso.
- Gowan, P. (2019). Crisis in the heartland. New Left Review 55.1, pp. 5–29.

Greenspan, A. (2008, October 23). (U. H. Congress, Intervieweur)

Greenspan, A. (2011, August 6). (N. M. Press, Intervieweur)

- Hearne, R. (2020). Housing shock: The Irish housing crisis and how to solve it. Policy Press.
- Hernández Vigueras, J. (2012). El Casino que nos gobierna. Clave intelecutal.
- Heuson, A., Passmore, W., & Sparks, R. (2001). Credit scoring and mortgage securitisation: implications for mortgage rates and credit availability. *Journal of Real Estate Finance* and Economics, pp. 337–363.
- HM Treasury. (2021, March). The mortgage guarantee scheme.
- Homer, A. (2019, March). Right to Buy homes made £2.8m in profit "in weeks". BBC.
- House of Commons Library. (2012). Olympic Britain. Built it up, sell it off: The rise and fall of social housing.
- Housing Europe. (2010). Social housing in Europe: Germany, France, Denmark.

Hurst, M. (2011, April 21). Debt and family type in Canada. Statistics Canada.

- Hydro One. (2016). Investor Overview Post Third Quarter.
- International Monetary Fund. (2013). *Financial Sector Assessment Program.* Publication Services.
- International Monetary Fund. (2019). *Balance of payments statistics yearbook and data files:* Annual report.
- International Monetary Fund. (2021). Currency composition of official foreign exchange reserves (COFER).

International Monetary Fund. (2022). Household debt, loans and debt services: Percent of GDP.

Johnson, B. (2021, October). Tory party conference speech.

- Knobel, A. (2019). Beneficial ownership in the investment industry: A strategy to roll back anonymous capital. *Tax Justice Network*.
- Kokko, A. (1999). Asienkrisenmånga likheter med den Svensks krisen. *Economisk Debatt*, pp. 81– 92.
- Leon, S., & Iveniuk, J. (2020). *Forced out: Evictions, race, and poverty in Toronto*. Wellesley Institute.
- Levac, M., & Woolridge, P. (1997). The fiscal impact of privatization in Canada. *Bank of Canada Review* (Summer 1997).
- Lewis, N. (2022). The uneven racialized impacts of financialization. Ryerson University.
- Liberal Party of Canada. (2021). A home for everyone: The Liberal housing plan.
- McCarthy, T. (2020). Starlight Investments and KingSett Capital complete C\$4.9B acquisition of Northview Apartment REIT.
- McMullan, L., Osborne, H., Blight, G., & Duncan, P. (2021, March 31). UK housing crisis: How did owning a home become unaffordable? *The Guardian*.
- McNally, D. (2009). From financial crisis to world-slump: Accumulation, financialisation, and the global slowdown. *Historical Materialism*, *17.1*, 35–83.
- Meinzer, M. (2015). *Tax haven Germany: Why many rich don't pay tax here.* Tax Justice Network.
- Ministère de la Transition Écologique de France. (2021). L'article 55 de la Loi solidarité et rénouvellement urbain (SRU): mode d'emploi.
- Molina, E. (2017). Una nueva regulación para los arrendamientos de vivienda en un contexto europeo. (*Doctoral thesis*). Universidad Rovira i Virgili.
- Munch, J., & Scarer, M. (2015). Denmark: Rent control and tenure duration. *SSRN Electronic Journal*, *52*(3), pp. 542–560.
- NAREIT. (2021). What assets do REITs own? https://www.reit.com/what-reit
- NAREIT. (2021). What's a REIT (real estate investment trust)? https://www.reit.com/what-reit
- OECD. (2016). Statistical insight: What does household debt say about financial resilience?
- OECD. (2019). OECD affordable housing database.
- OECD. (2020). Pension markets in focus.
- OECD. (2021). HC1.2 Housing costs over income.
- OECD. (2021). Public policies towards affordable housing.
- Piketty, T. (2019). Capital et idéologie. Éditions du Seuil.

- Poloz, S. (2018). *Canada's economy and household debt: how big is the problem?* Bank for International Settlements.
- Prentice, C., & Revill, J. (2021). Credit Suisse to pay \$475 mln to resolve Mozambican scandal charges. *Reuters*.
- PricewaterhouseCoopers (PWC). (2021). Worldwide real estate investment trust (REIT) regimes.
- Realpac. (2020). Realpac Year in Review.
- REALpac. (2021). Benefits of membership: Influencing public policy.
- Rent Guide IVS. (2018). What you need to know about the rent control board (Huslejenævnet).
- Saminather, N. (2021, October). Analysis: Bank of Canada's early lift-off warning may dampen housing boom fanned by speculators. *Reuters*.
- Sassen, S. (2012). Expanding the terrain for global capital: When local housing becomes an electronic instrument. Dans M. B. Aalbers, Subprime cities: The political economy of mortgage markets, first edition. Blackwell Publishing Ltd.
- Sassen, S. (2019). The process of "financialisation" of real estate assets. (OECD, Éd.)
- Schwarz-Hansen, C. (2020). Will the new rules on rent reduction result in a lower rental yield for landlords&. Njord's Law Firm: https://www.njordlaw.com/will-new-rules-rentreduction-result-lower-rental-yield-landlords
- Senate of the USA. (2012). HSBC exposed US financial system to money laundering, drug, terrorist financing risks.
- Shaxson, N. (2011). *The cost of tax abuse.* Tax Justicen Network.
- Shaxson, N. (2019). Tax havens: Britain's second empire. Tax Justice Network.
- Shaxson, N. (2021). *Tax havens meet monopoly power: Why national competitiveness harms competition.* Tax Justice Network.
- Sovereign Wealth Fund Institute. (2021). *Top 100 largest sovereign wealth fund rankinds by total assets.*
- Statistics Canada. (2016). Core housing need, 2016 census.
- Stiglitz, J. (2009). Lessons from the global financial crisis of 2008.
- Tasker, J. (2021, August). Trudeau promises new incentives worth billions and a tax on "flipping" to help Canadians buy a home. *CBC*.
- Tranjan, R. (2021, November). COVID-19 didn't kill neoliberalism; we must do it ourselves. *The Monitor*.
- UC Santa Barbara. (2020). The American President Project.

- UN Office of the High Commissioner for Human Rights (OHCHR). (1996). Fact Sheet No. 16 (Rev. 1): The Committee on Economic, Social and Cultural Rights.
- Valckx, N. (2017). *Rising household debt: What it means for growth and stability.* International Monetary Fund.
- Van Nes, T. (2020). *The effect of social housing developments on housing prices in Amsterdam.* Master's Thesis, Rijksuniversiteit Gronigen.
- Varoufakis, Y. (2011). The global minotaur: America, the true origins of the financial crisis and the future of the world economy. Zed Books.
- Vonovia. (2021). Shareholder structure.
- Walks, A. (2013). Mapping the urban debtscape: The geography of household debt in Canadian cities. Urban Geography, 34(2), pp. 153–187.
- Walks, A. (2014). Canada's housing bubble story: Mortgage securitization, the state, and the global financial crisis. *International journal of urban and regional research*.
- Walks, A., & Clifford, B. (2015). The political economy of mortgage securitization and the neoliberalization of housing policy in Canada. *Environment and Planning A*, 47, pp. 1624–1642.
- Wallach, O. (2020, November 4). *The 25 largest private equity firms in one chart*. Visual Capitalist: https://www.visualcapitalist.com/25-largest-private-equity-firms-chart/
- Wheeler, B. (2015). History of social housing. BBC.
- Woodman, S. (2021). Deutsche Bank agrees to pay \$130 million in latest major US penalty. International Consortium of Investigative Journalists (ICIJ): https://www.icij.org/investigations/fincen-files/deutsche-bank-agrees-to-pay-130million-in-latest-major-us-penalty/
- World Inequality Database. (2020). *Top 10% national income share: Canada, 1820–2021*. https://wid.world/country/canada/
- World Inequality Database. (2021). *Top 1% national income share: Canada, 1997–2021*. https://wid.world/country/canada/
- Yalnizyan, A. (2010). The rise of Canada's richest 1%. Canadian Centre for Policy Alternatives.
- Zabai, A. (2017, December). Household debt: Recent developments and challenges. BIS Quarterly Review.
- Zuloaga, J. (2018). BBVA sells its last large problem portfolio to CPPIB. El Confidencial.

<sup>i</sup> The finance sector has reached such a level that it exceeds economic reality. The Bank for International Settlements of Basel estimated that the derivative market has an over-the-counter value of US\$610 trillion at the end of June 2021. In contrast, the global GDP has a value of around US\$84.5 trillion, according to the World Bank.

https://www.bis.org/publ/otc\_hy2111.htm/

https://data.worldbank.org/indicator/NY.GDP.MKTP.CD

<sup>#</sup> The USA was the only real winner of the Second World War. While the war blighted Europe and the Far East, US industry soared due to the war effort. In this sense, the US population was 6% of the world's population in 1945, but its GDP amounted to more than half of the global GDP.

The allies debated the future financial order at the conference of Bretton Woods some months before the end of the war. On behalf of the UK, John Maynard Keynes proposed a system based on a new supranational currency to equilibrate the financial flows. Still, the USA negotiators advocated for a global system based on the US dollar. The allies could do nothing other than accept the American proposal because they needed US credit to finance the war expenses and their subsequent economic recovery through the Marshall Plan.

<sup>III</sup> The first such agreement was concluded with Saudi Arabia in 1973. Under this agreement, the USA would militarily protect the House of Saud regime, and in exchange, Saudi Arabia would price its oil in dollars and invest its trade surplus in US government debt. Since then, the Saudis have accepted only dollars in exchange for oil. Likewise, the Organization of the Petroleum Exporting Countries (OPEC) members reached similar agreements with the USA in 1975.

<sup>iv</sup> Central banks purchase securities in the open market, mainly government bonds, to increase the money supply and sell them to reduce the supply of money. Thus, central banks determine the interest rate and the availability of base money in an economy. For instance, the Bank and the Government of Canada adopted the inflation-control target in 1991. The target aims to keep total consumer price index inflation at the 2% midpoint of a target range of 1 to 3% over the medium term (Bank of Canada, 2021). The European Central Bank's target is also a 2% inflation rate (ECB, 2021). A persistent deficit in the balance of payments or a structural public deficit may well damage the value of a currency, except for the US dollar since it is the world's reserve currency.

<sup>v</sup> Dahiya et al. (2019) offer alternative narratives of the causes and effects of the events outlined and the role of central banks. How credible is the widely held belief that the Federal Reserve supports the markets?

<sup>vi</sup> Dahiya et al. (2019) offer alternative narratives of the causes and effects of the events outlined and the role of central banks. The authors state that the "Greenspan put" has been a presumption of the financial markets more than a real and empirical evidence. At any rate, the authors express that this belief had a significant impact on the markets.

<sup>vii</sup> In the US, the growth rate of per capita national income dropped from 2.2% per year between 1950 and 1990 to 1.1% between 1990 and 2020, while the share of the top percentile (the 1% highest incomes). In national income rose from 12% to 18% over the same period. In the

US, the growth rate of per capita national income dropped from 2.2% per year between 1950 and 1990 to 1.1% between 1990 and 2020, while the top marginal tax rate applied to the highest incomes dropped from 72% to 35% over the same period.

In Western Europe, the growth rate of per capita national income dropped from 3.3% per year between 1950 and 1990 to 0.9% per year between 1990 and 2020, while the share of the top percentile (the 1% highest incomes). In national income rose from 8% to 11% over the same period (average Germany-Britain-France). In Western Europe, the growth rate of per capita national income dropped from 3.3% per year between 1950 and 1990 to 0.9% per year between 1950 and 2020, while the top marginal tax rate applied to the highest incomes dropped from 98% to 49% over the same period (average Germany-Britain-France) (Piketty, 2019).

<sup>viii</sup> The excessive financial risk taken during the 1920s triggered the Wall Street Crash of 1929 and the subsequent Great Depression. The Glass-Steagall Act of 1933 aimed to avoid the repetition of a stock market collapse, protect the individual saver's money, and restrict banking speculation to turn credit to productive uses. This regulation introduced several measures including the practical separation of commercial banking from investment banking. The Glass-Steagall Act defined commercial banks as banks that take in deposits and make loans and investment banks as banks that underwrite and deal with securities. Thus, commercial banks were no longer allowed to underwrite or deal in securities, with the exception of governmentissued bonds (FINRA, 2015).

However, these restrictions had a national scope, with limited effectiveness tin the USA. In the 1960s, the UK government intended to overcome the Empire's decline by converting London into the global centre for financial trading through the Eurodollars system. The Eurodollars were US dollar deposits out of the reach of American regulators. Thus, London became the international centre for the trade of dollars by the 1960s. For this reason, US banks established affiliated companies in London to take advantage of that trade outside Fed regulations.

<sup>ix</sup> This law reorganized the regulatory system with the purpose of avoiding bad practices of entities "too big to fail." In other words, companies whose risky management could jeopardize the economic system, such as American International Group (AIG) whose bail out by the Fed cost \$180 billion in 2008. For that reason, the law created the Financial Stability Oversight Council to identify and monitor excessive risks to the US financial system. The law identified 16 areas of reform. These included the improvement of the regulation of credit rating agencies and the insurance industry and the establishment of the "Volcker Rule" that restricted banks from some high-risk investments.

\* The Treaty of Versailles (1919) required Germany to pay reparations to certain countries for the damages caused during the First World War. The Young Plan for setting reparations reduced the German burden in 1929. This plan included the creation of the Bank for International Settlements of Basel (BIS) in 1930 to facilitate the payments. However, Germany suspended reparation payments just one year after and the BIS' task became to foster the cooperation between central banks. The Bretton Woods agreements recommended the liquidation of the BIS because of the collaboration of several directors with the Nazi regime during the war. However, John Maynard Keynes advocated for the continued existence of this institution, since be considered it necessary to have an institution where central banks could meet. Thus, the decision to liquidate the BIS was reversed in 1948.

During the validity of Bretton Woods, central bankers met in Basel to keep the gold price level, as agreed (35 US dollars per ounce). In 1974, after the abandonment of the gold standard during the Nixon Shock, the BIS created the Bank Committee on Banking Supervision (BCBS). The reason was that the substitution of the gold standard for a financial system based on floating currencies could cause economic instability. Thus, this institution has dealt with commercial banking supervision since then.

The risks of globalized financial markets became evident after the stock market crash of 1987. In 1988 the BCBS published a set of minimum capital requirements for banks known as Basel I. Although the Basel agreements are recommendations, the members of the BIS implement them as legislation in force.

In 2004 the BCBS published a new set of recommendations known as Basel II. These recommendations qualified the credit risk depending on its nature and established new standards to calculate the bank's capital. However, the GFC occurred before Basel II could become fully effective.

<sup>xi</sup> The qualifications given by Basel have a profound impact on the economy and politics. For instance, if credit rating agencies qualify the sovereign debt as AAA the risk weight of its bonds is 0%. If the sovereign debt is qualified as BBB the risk weight is 50%. It is easier and cheaper for a country to obtain funds since its debt is rated AAA, such as Canada. For instance, Italy's sovereign debt is BBB. Thus, Basel intervenes in economic policies and empowers the rating agencies known as "the big three."

<sup>xii</sup> For regulatory residential real estate exposures that are not materially dependent on cash flow generated by the property, the risk weight to be assigned to the total exposure amount will be determined based on the exposure's LTV ratio in Table 11 below. The use of the risk weights in Table 11 is referred to as the "whole loan" approach (Bank for International Settlements, 2022)

Whole loan approach risk weights for regulatory residential real estate<br/>exposures that are not materially dependent on cash flows generated by the<br/>propertyTable 11

	LTV ≤ 50%	50% < LTV ≤ 60%	60% < LTV ≤ 80%	80% < LTV ≤ 90%	90% < LTV ≤ 100%	LTV > 100%
Risk weight	20%	25%	30%	40%	50%	70%

xiii Bank for International Settlements. Calculation of Risk Weight Assets for credit risk. Eligible assets 20.34, 20.38 (Bank for International Settlements, 2022)

#### Risk weight table for rated covered bond exposures

Table 8

Issue-specific rating of the	AAA to	A+ to	BBB+ to	BB+ to	Below
covered bond	AA-	A-	BBB-	B-	B-
"Base" risk weight	10%	20%	20%	50%	100%

xivRetrieved from https://www.ownyourhome.gov.uk/scheme/mortgage-guarantee-scheme/

\*\* Retrieved from https://kaingaora.govt.nz/home-ownership/first-home-loan/

<sup>xvi</sup> Retrieved from https://www.nhfic.gov.au/what-we-do/support-to-buy-a-home/firsthome-loan-deposit-scheme/

<sup>xvii</sup> Retrieved from https://www.ownyourhome.gov.uk/scheme/help-to-buy-2021-2023/

xviii Retrieved from https://kaingaora.govt.nz/

xix Retrieved from https://www.housing.wa.gov.au/sharedstart/Pages/default.aspx

\*\* Retrieved from https://kaingaora.govt.nz/home-ownership/

xxi Retrieved from https://www.wa.gov.au/organisation/department-of-finance/fhog

<sup>xxii</sup>The EU is committed to implementing the Basel III framework in the EU. Its implementation started with the coming into effect of the new CRD IV package on July 17, 2013, several years before "Brexit."

<sup>xxiii</sup> The prime minister, Boris Johnson said the following on this matter during his speech on the final day of the Conservative party annual conference in Manchester on October 10, 2021: "And this government is helping young people to afford a home. It has been a scandal—a rebuke to all we stand for that over the last 20 years the dream of home ownership has receded and yet under this government we are turning the tide we have not only built more homes than at any time in the last 30 years we are helping young people on to the property ladder with our 95% mortgages and there is no happiness like taking a set of keys and knowing that the place is yours and you can paint the front door any colour you like" (Johnson, 2021).

<sup>xxiv</sup> The relationship between minority groups and household debt is not clear: urban neighbourhoods concentrating minority groups (Chinese and Black people) and First Nations, but not other minorities, had significantly lower levels of household debt on average, suggesting a complex interplay of immigration status, race, and debt among Canada's cities that deserves more detailed future study (Walks, 2013).

<sup>xxx</sup> REALPAC has consistently been advocating with provincial governments across the country against the policy of commercial evictions moratoriums, an unnecessary policy given that it could disincentivize otherwise successful tenants from paying their rent and meeting their rent obligations. REALPAC monitored and fought for reasonable approaches in all major provinces both on residential and commercial. This was a major focus in Ontario and Alberta in 2020. REALpac (2020). 53 <sup>xxvi</sup> PricewaterhouseCoopers (PWC) (June 2021). Worldwide Real Estate Investment Trust (REIT) regimes.

-Data for Germany: EPRA industry newsletter 2017

—Data for France: French real estate performance in 2020 French Real Estate Funds Performance in 2020 – Rock & DATA (rock-n-data.io).

-Data for the US: NAREIT

-Data for the UK: London Stock Exchange