California shrugged: fountainhead of the Great Recession

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Received on June 22, 2010; accepted on January 24, 2011

California was the epicentre of the current Great Recession. Due to its economic structure, open economy, political institutions and other factors, it has a starring role in the four-fold US crisis underway—housing, urban, industrial and fiscal. First, California was a disproportionately large player in US mortgage markets and its banks engaged in the worst excesses of the housing bubble. Second, California exhibited disproportionate activity in the housing sector among the 50 states and had the most unaffordable housing, making borrowers susceptible to mortgage overreach. Third, the state is the country’s largest subeconomy at the forefront of technological innovation, but it manifests troubling elements of industrial decline. And fourth, its fiscal crisis is among the worst of any state.

Keywords: California, crisis, housing, finance, mortgage, Great Recession

JEL Classifications: E52, R1, R12

Introduction

The financial crisis that struck in 2008 marked the onset of the worst economic downturn since the Great Depression of the 1930s. The newly dubbed ‘Great Recession’ is a worldwide phenomenon, which some have called the first true crisis of the era of globalization (Krugman, 2009; Stiglitz, 2010). The intensity of the downturn was bound to be felt unevenly across the globe, no matter how well-integrated world markets have become. The USA is generally acknowledged to be the pivotal country in the drama of the crisis. But the geography of the crisis has yet to be explored more precisely at the subnational level.

Much has been written about Wall Street, the world’s financial centre, infecting the entire global system (Read, 2009; Shiller, 2008). Yet, if Wall Street was the eye of the financial hurricane, then California was the tropical sea that provided the heat to feed the raging storm. More than any other place, California was the source of mass mortgage lending, ballooning home values and dubious sub-prime operations, and behind that was California’s leading role in US urban, industrial and fiscal developments that underlay the stresses and strains on the financial system. To use a literary metaphor of significance to the neoliberal lords of Wall Street, California was the fountainhead of the financial
bustary and when California shrugged the economic world shuddered.\(^1\)

Four propositions, each corresponding to a particular facet of the crisis, support the idea that California was the fountainhead of the bubble and show that the state is bearing a disproportionate brunt of the fallout. First, California was the biggest player in US mortgage markets and its banks engaged in the worst excesses of the housing bubble. Second, California boasts the largest housing sector among the 50 states and the most unaffordable housing, making more borrowers susceptible to mortgage overreach. Third, the state is the country’s largest subeconomy at the forefront of industrial change, technological innovation and globalization, but it manifests troubling elements of industrial decline. Fourth, it has the largest state budget in the country and has suffered the worst fiscal crisis.

California has fallen hard since the financial crisis struck in 2008. It has taken a bigger hit than almost any other part of the country. As Steven Levy of the Center for the Continuing Study of the California Economy has put it, “We were at the epicenter of the housing bubble, and we are at the epicenter of the fallout” (Steinhauer, 2009).

The state lost over 1 million jobs from the peak of employment in July 2007 to the end of 2009, the largest absolute drop of any state. Over half of those losses came from construction, real estate and mortgage finance-related firms. Unemployment hit 12.4% in December 2009—well above the national average of 10%. Adding part-time and discouraged workers, underemployment jumps to a staggering 18%.

California’s state exports of $76.1 billion were down from $98.9 billion through the first 8 months of 2008, a fall of 23%. Personal and business bankruptcies were up 58% in 2009 compared to a national jump of 32% (Baker, 2010). California’s property markets were stricken. The state’s cities were among those with the largest declines in housing prices, foreclosed mortgages and abandoned homes (Kroll, 2009).

Finally, California’s government deficits are among the worst in the country, in both absolute and relative terms. The budget gap was well over one-third of the fiscal year 2009 general fund and 2% of the gross state product. The state’s shortfall that year accounted for more than one-half of the total $63 billion deficit of all 50 states (McNichol and Johnson, 2009).

No one doubts the pivotal role of the USA or China in the world economy today. But when it comes to smaller subnational regions, we are more reluctant to assign them causal powers in the way the global economic organism operates. Economic geography has a more complex anatomy than this, with localities and regions playing dynamic roles in an uneven and combined global economy. There are several useful geographic and economic theories that capture facets of the local and global dialectic, yet none quite captures the dynamic interaction of places and scales, of the local and the global (for example Cox, 1997; Scott, 1998).

Our view is that some places are crucial to the operation of the system and act as prime movers of capital accumulation. Indeed, it is not uncommon to see local eruptions alter the course of national and global economies. Consider, for example the role of Boston’s manufacturing satellites in the American industrial revolution, Detroit and the upper Midwest in the Fordist era, Chicago’s development of derivatives that altered the course of recent financial markets or how Guangdong’s Special Economic Zones launched the industrial reforms in China.

California has been at the leading edge of the US economy for decades, outgrowing most of the rest of the country and drawing in labour and capital from here and abroad. It has a legitimate claim to being considered the keystone in the broad arch of contemporary American capitalism, with its leadership in entertainment, electronics, weaponry and agribusiness. At the same time, California has been a leading purveyor of hyped-up happiness and easy money from the mining stocks of the 1870s to the dot-com bubble of the 1990s (McWilliams, 1946; Tygiel, 1994). In the 2000s, the latter role overwhelmed the former.

What sets California apart is not just size or concentration of key economic sectors, although both are critical. It has been a leader in technical innovation, from missiles and aircraft to computers and...
the Internet, from film and animation to medical instruments and biotechnology, and it has shown a strong skew in the division of labour towards skilled work, white-collar occupations and service sectors. Driving this economic bent has been a high degree of cultural fluidity and social mobility and a high level of education and entrepreneurialism (Saxenian, 1994; Walker, 2008). By virtue of its location on the west coast, California has been marked by its openness to trade, immigration and investment linkages with the most buoyant region in the world, East Asia. All this gives its economy a flavour apart from the rest of the USA.

**Four horsemen of the apocalypse**

The Great Recession—severe by any number of indices (Henwood, 2009)—rode in on the backs of four horsemen of crisis: financial, urban, industrial and fiscal. All four are necessary to set the context of the boom and the bust in the USA, before considering California in detail.

**The US financial crisis**

In 2008, the USA experienced a financial meltdown of extraordinary proportions. At the heart of the financial crisis was the accumulation of an unsustainable load of mortgage debt. As house prices rose dramatically through the late 1990s and 2000s, more than 14 million new mortgage loans were issued and the amount of home loans outstanding exceeded $10 trillion by 2006, doubling in little over 5 years (Phillips, 2008; Shiller, 2008).

Housing lenders turned around and sold their mortgages in secondary markets to raise more capital for further lending. This kind of securitization has the virtue of providing liquidity in place of lumpy fixed assets. As far-off investors snapped up mortgage-backed securities, it allowed local banks to lend again without holding long-term loans on their books.

The downside of securitization is that it distances mortgage originators from investors in mortgage securities, allowing them to pass on dodgy loans to someone far away. This led to increasingly loose practices by mortgage originators. Subprime mortgages—made in nontransparent circumstances and with insufficient attention to ability to repay as well as adjustable rate loans and those with initial teaser rates—rose from 6% of mortgage originations in 2002 to 20% in 2006 (Bardhan et al., 2009); the subprime share of mortgages outstanding quintupled over half a decade (Figure 1).

More disturbing mortgages were securitized not just once, but twice and thrice. Mortgage-backed securities were repooled, repackaged, sliced and diced to generate exotic securities (or derivatives), such as collateralized debt obligations (CDOs). CDO issuance shot up from $20 billion in 2004 to $180 billion in late 2006. The central players in this game were the big New York investment banks, but they were complemented by pension funds and hedge funds (Gowan, 2009; Stiglitz, 2010).

The big banks made things worse. They began holding large amounts of exotic securities themselves, usually ‘off-book’, in structured investment vehicles. Then, to guard against the increased risk, they bought credit default swaps (CDSs) from companies like AIG. The notional amount of CDSs reached a breathtaking $69 trillion by 2008. Most of these new-fangled products were given high marks (low risk) by rating agencies, such as Moody’s (Shiller, 2008).

Needless to say, these practices were subjected to growing speculative activity and, as securities values rose, investments were leveraged with borrowed money. In the end, risky investments mounted and debt ratios grew astronomically, leading to a credit bubble of historic proportions (cf. [Figure 1. Share of subprimes in total mortgages. Source: Federal Reserve.](https://academic.oup.com/cjres/article-abstract/4/3/303/333498/333498)
All this was underwritten by a wink and a nod from regulators and government authorities. Deregulation allowed greater scope for bank lending, creation of derivatives and the rise of ‘a shadow banking system’. Meanwhile, the Federal Reserve (The Fed) kept interest rates low, enabling Wall Street to operate with high leverage—further stimulating speculation in asset values. In the end, all this financial ‘risk taking’ was guaranteed by the most comprehensive hedge of all—a government bailout.

Nonetheless, the frantic pace of asset price increases could not be sustained indefinitely, and when prices slipped, the financial feedback loops worked in reverse. By the end of 2006, housing sales had weakened, prices were declining and mortgage payments fell behind. Early 2007 saw a rash of foreclosure filings and soon everyone demanded hard cash in place of future high returns. Severe credit and liquidity shortages appeared and financial markets stalled.

Mounting losses continued in 2008, bringing down Bear Stearns, Lehman Brothers, Merrill Lynch and AIG, and the icy breezes spread across Europe and beyond (Read, 2009). The federal government took over AIG and renationalized Fannie Mae and Freddie Mac (dealers in over half of all secondary mortgages). Nonbank investors, such as hedge funds, pension funds and securitization vehicles, suffered massive losses (O’Connor and Guerrera, 2009). Subprime securitization plummeted (Figure 3).

What were the underlying causes of the mortgage mania, subprime spread and financial meltdown? To answer this, we need to look at developments in housing markets and urban centres of the country.

US housing and the urban crisis

The housing sector has played a striking role in US economic activity recently. As home sales climbed during the upswing of the 2000s, construction contributed about one-fourth of growth of gross domestic product (GDP)—more than health care or military spending (Brenner, 2009). At the same time, house prices mounted, with the national median more than doubling over the course of the 1990s and 2000s. Something strange was happening, as house prices outran equivalent rents and

Figure 2. Total credit market debt as a percentage of GDP.
Source: Federal Reserve, Bureau of Economical Analysis.
the housing boom roared right through the stock market crash and recession of 2000–2002. Was this a classic real estate bubble? (Hoyt, 1933). Yes and no.

The primary cause was abundant credit spewing forth from the world of high finance. Mortgage loans were readily available thanks to the hyperactive secondary market—so much so that all kinds of ‘innovative’ mortgage began to be offered to lure home buyers. In addition, loans became cheaper as the Fed dropped interest rates to stave off recession, 2000–2003; prime rates fell to the lowest level in 50 years and mortgages followed, settling at 5–6%.

Easy credit allowed buyers to bid up house prices across the board. Then, with fast-rising prices, an asset bubble was set in train. Bigger loans and higher monthly payments seemed justified by the prospects of rising prices and eventual sale (the wealth effect). The prevalent ‘story’ that ‘home prices never go down’ provided additional sociopsychological lubricant to the whole process (cf. Akerlof and Shiller, 2009). The boom created trillions of dollars of illusory wealth and nurtured widespread delusional thinking about easy returns.

Where this bubble was unusual was how it fed off stagnant incomes among the majority of working families (Brenner, 2004). They were induced to stretch their finances to the breaking point under the illusion that home ownership was the road to prosperity and a cash cow for strapped households. Unscrupulous brokers and shady lending practices fed the fires of the bubble. As a result, American households accumulated mountains of mortgage debt and debt-service payments cut deeper into disposable incomes (Figure 4).

Growing inequality further distorted housing markets. With two-thirds of income gains in the 2000s going to the top 1% of US households (Piketty and Saez, 2009), the rich bid up prices, inducing new home builders to construct a surfeit of large houses and left a shortage of modest homes (Tully, 2008). This, combined with the desperate borrowing by low-income families, meant that housing prices in the lower segments of the market became the most inflated (Shiller, 2008, 36). Not surprisingly, African Americans and Latinos had twice the exposure to subprime loans as whites (CSI, 2009).

Another peculiar dimension of the bubble was geographic. As wealthier households moved to city centres along the coasts, it pushed up prices and squeezed families with modest incomes out of older districts (Lees et al., 2007). Low-income and first-time buyers sought refuge in the far exurbs, where prices (and house size) appeared to be a bargain by comparison; many of the latter were targeted by subprime marketers.

In the end, millions of home buyers got in over their heads and could no longer meet their mortgage payments. When teaser rates on subprime and adjustable rate loans ran their course, matters only got worse. A huge wave of foreclosures hit in 2007–2009—more than 3 million filings and 860,000 homes were lost in 2008 alone (Christie, 2009). To compound matters, the resulting fall in prices led to large numbers of houses being worth less than the amount owed on them, causing further foreclosures. Rising unemployment drove the final nail into the housing market.

As reeling banks dumped foreclosed homes (~22% of sales), it knocked the bottom out of the market. Median prices fell by about 30% from 2006 to 2009 and new construction fell by more than half (Kroll, 2009). By mid-2009, the number of houses...
valued at less than their mortgages (underwater) passed 10 million, 23% of the market and almost 19 million houses stood empty, as many people just walked away from their homes (Levy, 2009; Temple, 2008).

**US industrial decline**

Beneath the financial and housing crises lay a weakening of the underlying American economy. Growth has been quite modest over the past four decades as compared with the robust expansion of the postwar ‘Golden Age’—on average, about half the rate of increase in GDP, productivity and personal income—and cyclic downturns have struck in every decade. The recession of the early 1970s saw a dramatic fall in the rate of profit and in the US dollar, along with large bank failures (Brenner, 2006). The downturn of the early 1980s was especially costly in terms of jobs, with unemployment peaking at more than 10% (Bluestone and Harrison, 1982).

The downturn of the early 1990s was less traumatic, but job losses were still significant, and recovery was slower than after previous recessions. The revival of the mid-1990s had pundits touting the ‘New Economy’ of high tech and high finance, but it turned out to be a mixed blessing. While lots of hardware was sold and software jobs created, high-tech fantasies helped trigger one of the greatest stock bubbles in history, which collapsed in stunning fashion in 2000–2002 (Brenner, 2002; Walker, 2006).

The recession of 2001–2002 was surprisingly mild, thanks to forceful intervention by the Fed. Yet, the upswing that followed was the weakest of the last century, especially for employment (Brenner, 2009). From 2001 to 2008, US GDP grew by a feeble average of 2.2% and zero net jobs were created. With 8 million jobs lost in the Great Recession, private sector employment at the end of 2009 was at the same level (108 million) as a decade earlier (Bardhan, 2010).

Recent years have seen clear deterioration in the US industrial base. Total employment in...
manufacturing shrank from ~18 million in 1990 to 11.5 million in 2009. One reason is that many US industries have become uncompetitive in world markets. This has contributed to a monstrous US trade deficit, which peaked at $760 billion in 2006. Rapid expansion of ‘offshoring’ by US multinationals (transfer of production abroad with a view to importing goods back into the USA) has contributed to the decline. Onshore manufactures that remained viable have done so through productivity increases that yield few jobs or by serving domestic sectors that have been hit hard in the current recession—especially housing and automobiles.

Over the last quarter century, the US economy has created seven jobs in the so-called services sectors for every job lost in manufacturing. While the growth of services is a worldwide phenomenon, no other country has seen as dramatic a fall in manufacturing employment as the USA. There seemed little cause for worry as long as only low-skill jobs were moving offshore, high-skill sectors like software and business services were growing, and cutting edge innovative activity remained anchored in the USA. Unfortunately, offshoring came to embrace a range of previously untouched services and occupations, including high-tech research and development (Bardhan, 2008).

The eroding industrial foundation has undermined wages for the American worker. Wages for the bottom half of the workforce have been stagnant for more than 30 years, opening up an unprecedented gap between productivity and wage increases (Brenner, 2006). Some of this is due to competition from cheaper labour, whether globally or domestically through immigration, and some to technological change putting a premium on skilled labour (Rodrik, 1997). But the main cause is the reduced bargaining position of workers owing to weak labour demand, high unemployment, weakened labour laws and the decline (and defeat) of unions (Greenhouse, 2008).

Stagnant wages, coupled with tax cuts on businesses and the rich during the Reagan–Bush years, meant greater inequality. One sign was the rising share of corporate profits in GDP, which hit an 80-year high of 14% in 2006 (Figure 5). Another was the enrichment of owners of capital assets (Keister, 2000). Conversely, no other wealthy country has seen the impoverishment of so large a segment of the working class (Abranskey, 2009).

The build-up of wealth at the top did not translate into greater investment. On the contrary, discouraged by humdrum returns on routine assets and given higher returns available in emerging economies, US investors sent their money abroad or shifted focus domestically to speculative assets. All this extra money gushing into the financial sphere exacerbated profit seeking on paper assets and undue risk taking.4 Nevertheless, Germany and Japan have done a much better job of maintaining their manufacturing bases, despite the same global competitive pressures (Culpepper and Finegold, 1999).

To maintain rising levels of consumption, given stagnant wages and incomes, many households went deep in debt. This was encouraged by US policy makers, especially after the Asian crisis of 1997 threw a scare into the world financial markets; the USA was asked to pull the world out of recession by consuming more. Moreover, working Americans might have become restive over global labour competition and declining wages without the balm of rising debt and cheap imports. The ‘wealth effect’ of the housing bubble helped sustain consumption.

An insidious idea that gained popularity in recent years is that personal consumption has become the principal motor of economic growth, as the consumption share of national spending rose from

![Figure 5. Share of corporate profits before Tax in GDP. Source: Bureau of Economic Analysis.](https://academic.oup.com/cjres/article-abstract/4/3/303/333498/333498)
62% in the 1960s to more than 70% of GDP in the 2000s. But a high-consumption share is nothing more than a trade-off with weak savings and low investment (Keynes, 1936).

The fiscal crisis of the American state
To add a bitter dessert to this lean economic meal, governments across the USA faced slow-growing revenues even before the onset of the Great Recession. Some of the shortfall is due to tax cuts for the rich and corporations, thanks to the neoliberal triumph of the Reagan–Bush–Clinton administrations (Harvey, 2005). But weak economic performance made tax cutting more popular, whether among the favoured or those whose incomes were flat (Frank, 2000). To compensate for slack revenue, governments have resorted to debt financing, as in the private sector, based on easy credit from financial markets. Government indebtedness at all levels has thus grown rapidly over the past 30 years (Sbragia, 1996) and shot up even faster in the 2000s (Figure 6).

When the crisis hit in 2008, governments across the nation saw their revenues plunge and budget deficits soar. State and local governments have had to slash spending and lay off thousands of public workers, making the recession worse by lowering public and private demand for goods and services. The federal government, on the other hand, has continued to spend, first with the Bush bank bailouts and then the Obama stimulus American Recovery and Reinvestment Act (ARRA), running up big deficits and piling up debt. The national debt is now the highest in peacetime history—although as a percentage of GDP, it is below that of the UK, France and Italy and well below Japan (or even the USA at the end of World War II). 5

Deficit spending serves as a fiscal stimulus to counteract the recession (Keynes, 1936; Krugman, 2009). But state and local governments, unlike the Feds, are required to balance their budgets by law. While federal programs have provided some relief at the local level, part of the stimulus package aimed at state deficits was cut out of ARRA by Republicans in Congress. Hence, the lower orders of government have been adding their deflationary cuts to the general downturn, working against the stimulus effort coming out of Washington (McNichol and Johnson, 2009).

In sum, financial bloat, the housing bubble, industrial decline and fiscal crisis have worked together to make this the most severe economic recession in the USA since the 1930s. Clearly, the four horsemen of the apocalypse rode together into the heart of the American economy, leading to what is now known as the Great Recession.

California: four strikes, you’re out
California has not just suffered along with the rest of the USA. It has, more than any place other than Wall Street, been responsible for the bubble economy of the 2000s and the economic crisis that followed. This can be seen in each of the four domains previously charted. Given California’s notorious law and order regime, we like to refer to these as four ‘strikes’ against the state.

California’s financial frenzy
While much of the financial alchemy in secondary mortgages, derivatives and investment vehicles had an East Coast address, a disproportionate amount of mortgage issuance, housing speculation and subprime lending took place in California. When the bubble burst, the state ended up with more bad loans and foreclosures than anywhere else, and its eager lenders were among the first to go belly up.

California has long specialized in hyperactive finance, so it is not surprising that California led the way in the mortgage madness of the 2000s. 6 With 12% of the total US population and 13% of its GDP, California lenders were responsible for a stunning 56% of the $1.38 trillion in subprimes issued at the peak of the bubble, 2005–2007 (Abate, 2009a), and more than 15% of its outstanding mortgages in 2007 were subprime, among the worst records among the states. The state’s share of adjustable rate mortgages (ARMs) stood at 17.3%, and the so-called ‘sand states’ (Arizona, California, Florida and Nevada) together accounted for 46% of
ARMs. The state was home to 9 of the top 10 subprime lenders, including the top 5: Countrywide Financial, Ameriquest Mortgage, New Century Financial, First Franklin and Long Beach Mortgage (a division of WaMu) (Abate, 2009a).

Washington Mutual, based in Seattle, entered Southern California with seven acquisitions from 1996 to 2006, starting with American savings (alone equal to all its Pacific Northwest holdings), finally making WaMu California’s #2 bank. WaMu rose to the largest US savings and loan company, then reorganized as the nation’s sixth largest bank, leaving Golden West/World Savings of Oakland as the largest originator of ARMs in the country. Golden West had $122 billion of loans in its portfolio when it was sold to Wachovia Bank in 2006, helping the latter rise to the fourth largest banking corporation in the country in 2008.9

While it is difficult to gauge the magnitude of all California-based lending due to the geographical fungibility of financial flows, an approximate measure is the state’s share of total US homes sales multiplied by the median sale price of existing homes—an indicator of the total amount of money sloshing through the financial system as a result of housing transactions (Figure 7). In 2005, California accounted for nearly a quarter of these financial volumes, primarily due to its high home prices. The previous peak in 1989 had an even higher share due both to a significantly higher share of transaction volumes and a price premium. Another indicator of mortgage finance activity is the growth of financial employment: the number of jobs in finance, insurance and real estate increased by 27% between 1996 and 2006 to almost 1 million total (Figure 8). While neither information technology nor business services employment recovered in the aftermath of the dot-com bust, the financial industry went from strength to strength.

Not surprisingly, when the crisis struck, California mortgage banks made up most of the top 10 bank failures. In 2007, New Century Financial declared bankruptcy and a failing Ameriquest was sold to Citicorp. In early 2008, IndyMac Bank was seized by the Federal Deposit Insurance Corporation (FDIC) and First Franklin was shuttered by Merrill Lynch, which had bought it 2 years earlier. In mid-2008, WaMu closed Long Beach Mortgage and Countrywide was seized by the FDIC and turned over to Bank of America (which has been trying to digest the mess ever since).

Bigger things were yet to come. WaMu’s collapse in late 2008 was the largest bank failure in American history up to that time (later exceeded by...
Lehman Brothers). Soon thereafter, the carnage from Golden West’s faulty ARMs overwhelmed Wachovia, which was later merged with Wells Fargo (Reed, 2008). Less spectacular, but telling, was the continued forced closures of California banks in 2009–2010, mostly over sour commercial property loans (Selna, 2009).

**California’s bloated housing and cities**

California led the way in inflating the housing bubble and in wanton urbanization. A number of factors set California apart. First, its home prices, which have eclipsed the rest of the country since 1970, became even more inflated in the 2000s, when the median home price hit a peak of $594,000 in 2006—two and one-half times the national peak of $221,000.¹¹ The San Francisco Bay Area boasted the highest prices of any metropolitan area in the USA—nearly quadruple the national average (Figure 9). Overall, property values in California more than doubled, from $2 to $4.4 trillion, 1998–2008.¹²

Second, nowhere else has housing been so unaffordable.¹³ That is, high home prices are not simply the product of high incomes. The Bay Area, for example has the highest household income of any metropolitan area in the nation, yet for 30 years it has also had the most expensive housing relative to income—one needs twice the median income to afford the median price house (California Budget Project, 2008; Walker and the Bay Area Study Group, 1990). Expensive housing drove down rates...
of home ownership and created fertile ground for subprime loans, as people stretched their incomes to buy overpriced homes. California witnessed a fundamental shift to subprime mortgages with no downpayment, adjustable rates and paltry documentation on household income (Sanders, 2008, 258).

Third, California’s urban geography exaggerated the worst features of the bubble. Greater Los Angeles, some 20 million strong, continued to surge across the Inland Empire of Riverside and San Bernardino counties, which doubled in population 1990–2009 (DeLara, 2009). The Bay Area developed its own Inland Empire in the Central Valley, where it collides with greater Sacramento and Stockton to form a Northern California megalopolis of more than 10 million people (Metcalf and Terplan, 2007). The vast majority of new construction during the bubble took place in the Inland Empires.

The class and race geography of California’s cities was remade in the process, with the gentrification of expensive central cities and suburbanization of the working population. The upper classes, mostly white, have rushed to the coastal cities. Places like Silicon Valley, San Francisco and Santa Monica are today virtually unaffordable for working families. San Francisco, in particular, has become dramatically older and less racially diverse (Fulbright, 2007). Meanwhile, the working class of California, chiefly immigrants and their children, has fled to the fringes to find jobs and affordable housing. Limited by poor wages in sectors like warehousing and retailing, they had to overreach to buy into the suburban dream (Bonacich and DeLara, 2009). Nowhere were people more in need of loose credit to stretch incomes to cover inflated house prices.

Such was the geographic manifestation of the state’s growing class divide. California was among the top 5–10 states in income inequality and growth of inequality, depending on the measure (Bernstein et al., 2008). The Golden State leads the country in its proliferation of millionaires and billionaires: it is home to 81 of the Forbes 400 wealthiest Americans compared to 76 for New York and 25 for Florida. Meanwhile, its employers have been successful at holding down wages using the leverage of mass immigration to good effect (Milkman, 2006).

With the boom came a gigantic wave of construction. In 2006, new home sales peaked at a rate of more than 200,000 per year and more than
16% of the national total (versus 12% of population). High prices meant robust profits for builders, such as local giants KB Home (formerly Kaufman and Broad), Shappell, Standard Pacific and Shea and divisions of the nation’s largest builders, such as Lennar, Pulte, Centex and D. R. Horton.\(^\text{14}\)

When the bubble burst, California’s housing market imploded (Said, 2009). It saw by far the largest absolute numbers of foreclosures, with close to 500,000 homes repossessed in 2007–2009 (Figure 10) and had, along with the three other ‘sand states’, the highest foreclosure rates.\(^\text{15}\) Housing overstretch was most exaggerated in the Inland Empires, where foreclosure rates above 50 per 1000 households were common.\(^\text{16}\)

The median house price at the end of 2009 had fallen 35–40% from the height of the bubble (Figure 11). Only Nevada edged out California for the worse plunge (and the two states are closely linked). Home values at the coasts and in city centres held up much better than in the interior, where several urban areas had cumulative prices declines more than 50% by the end of 2008—the worst in the nation. California had 2.4 million underwater mortgages by the end of 2009, around 35% of mortgage holders compared to 14% nationally (Levy, 2009).\(^\text{17}\)

Working families in the inland areas of California were the hardest hit. They suffered a double blow of home and job loss, with county unemployment rates exceeding 20–40%, due to job losses in construction, warehousing, agriculture and local services.

**California’s industrial woes**

California has long been in the vanguard of American industry, in electronics, aerospace, entertainment, medical technology, design and food production (Lewis, 2000; Saxenian, 1994; Scott, 1993, 2005; Walker, 2004). Overall, the state grew smartly from 1940 to 1990, exceeding the national average in job growth for a half-century and was especially robust in the 1980s (Walker, 1995) (Figure 12). During the electronics boom of the 1990s, it rose to fifth largest economy in the world ranked by national GDP (it has since fallen to eighth).

California has been the largest manufacturing state in the union for more than 40 years and still employs 1.3 million people in manufacturing (Milkman, 2006). In the 1980s, California bucked the trend of deindustrialization, felt so dramatically in the rust belt of the northeast (Walker, 1995).\(^\text{18}\) In the 1990s, the Bay Area became the model for US revival and job creation under the herald of The New Economy (Florida, 2002; Walker, 2006). Yet, despite California’s standing as an industrial powerhouse, troubling weaknesses were apparent by the 2000s.

First, job growth in California has stopped out-running the country. Southern California suffered a massive and permanent decline in aerospace jobs in the early 1990s (Walker, 1995). The high-tech Bay Area lost hundreds of thousands of jobs after the NASDAQ bubble burst (Walker, 2006). Both suffered major job losses when their respective real estate booms collapsed. California barely matched the sluggish national average of job growth in the last upswing, while job loss in the present recession has been calamitous (Figure 13).\(^\text{19}\)

Second, California has not grown only on the basis of high-skill labour as commonly believed. While high-end employment has been stronger than the national average, so has low-end job growth (Dube, 2005; Milkman and Dwyer, 2002). Southern California, in particular, has thrived on a bulging low-wage immigrant labour force. This helped drag down incomes among blue-collar workers. As
a result, California’s average income grew at only half the rate of the rest of the country, 1980–2000 (Carroll and Ross, 2003, 6).

Third, despite the hopes for high tech as a job generator, electronics has been a leader in shipping jobs abroad (Bardhan, 2008). Silicon Valley’s employment shrank in the 2000s, even as its wages rose, because midlevel white-collar and blue-collar work was being shipped out to India, China and elsewhere (Abate, 2009b). Hollywood has also been leaking jobs to Canada and other locations (Scott, 2005).

Fourth, Southern California’s strongest sector recently has been the export/import carrying trade through the ports of Los Angeles–Long Beach, the biggest shipping centre in North America. The ports feed into an enormous warehousing, transport and logistics corridor running out through the Inland Empire (DeLara, 2009). Ironically, while California gains from the export pass-through trade,
it has prospered in part on the import trade that undermines domestic industry.

Fifth, bubble-driven construction and real estate were California’s biggest job generators in the 2000s, making up more than 20% of employment growth (Dube, 2005), with financial sector job growth not far behind. When the housing bubble collapsed, the impact was devastating: construction spending fell by 60%, home-building fell by over four-fifths and about 600,000 jobs were lost in construction, real estate, finance and building supplies (Said, 2010).

Sixth, California’s share of employment in manufacturing has dropped markedly. Los Angeles suffered a fall from more than 1 million manufacturing jobs in the 1980s to just over one-half million today (Milkman, 2006). Meanwhile, the share of services has risen faster than the US average, with a marked increase accompanying the restructuring in the aftermath of the early 1990s. Services suffer from the well-known paradox of slow productivity growth and the undesirability of trying to raise productivity in many occupations (actors, lawyers, musicians, etc.). Moreover, the winner-take-all nature of many service jobs results in greater inequality within as well as between occupations (Bardhan and Kroll, 2006).

While investors continued to pour money into California in the 2000s, as they had in the last two booms and bubbles (Walker, 1995, 2006), the flood of capital has not done much to improve the state’s industrial outlook. The best scenario for the state is ongoing innovation and the generation of high value-added jobs in Silicon Valley, Hollywood and elsewhere, but even so the outlook is not robust. With increased global competition and the willingness of multinational firms to arbitrage labour cost differences, the sustainability of manufacturing profits and job creation in the state is questionable. Similarly, the prospects for California’s service exports and their capacity to generate jobs are relatively small (Bardhan and Kroll, 2006).

California’s crumbling finances

California has been at the forefront of the national fiscal crisis. It has the largest budget after the federal government, more than $100 billion per annum in the mid-2000s, and the largest budget deficit of any state, more than $35 billion in fiscal year 2009 (McNichol and Johnson, 2009) (Figure 14). California’s fiscal woes are not new. They were brought on by the tax revolt that started in 1978 with Proposition 13, which capped local property taxes and requires a two-third of vote of the legislature or the citizenry to increase taxes. Proposition 13 was the brainchild of Howard Jarvis, a long-time rightwing political organizer in Southern California.

**Figure 13.** US and California: annual employment change.
and head of the Apartment Owners Association (Goldberg, 2010). It appealed to voters squeezed by soaring housing costs (and hence property taxes) in the 1970s (Schrag, 1998). Rising property taxes were also the result of the way the costs of urban sprawl, due to rampant land development, the dominance of automobile transportation and poor city planning, had driven up local government expenditures (Walker, 2007). The so-called tax revolt was replicated in other states and served as a major stepping stone in the broader Reagan-era tax-cutting agenda.

The impact was immediate: local governments went into deep fiscal crisis in the recession of 1980–1982 and the state had to bail them out by transferring money from the general fund (Schrag, 1998). To make matters worse, the Reagan administration cut federal revenue sharing and aid to cities (Davis, 1993) and the George Deukmejian administration in Sacramento put its money into the greatest prison-building splurge in US history (Gilmore, 2007). To keep things running on reduced tax revenues, the government began to issue more bonds, putting the state farther and farther into debt (Goldberg, 2010).

In the downturn of 1990–1993, the state took a $11 billion nosedive into the red on a $50 billion budget (Walker, 1995). Governor Pete Wilson’s poll numbers fell precipitously and to save his skin, he seized upon ‘illegal immigrants’ as the cause of the problem. Xenophobia gained Wilson a second term in 1994, but he poisoned the Republican Party for Latinos and, as their numbers rose, Democrat Gray Davis was swept into the governor’s office in 1998.

The legislature tried to reboot spending in the boom of the 1990s, raising capital gains taxes to recover some of the riches flowing out of Silicon Valley. Alas, that bubble burst in 2000 and revenues fell off a cliff. This left the state with a deficit of $24 billion out of a $100 billion budget in 2002–2003 (Walker, 2006). The Republicans blamed Gray Davis for the cataclysm and succeeded in recalling the governor in 2003, electing Arnold Schwarzenegger in his stead. Schwarzenegger promised to solve the budget problems of the state, but could not—since he opposed all further tax increases or questioning of Proposition 13 (Schrag, 2006). Meanwhile, California’s overcrowded prisons fell into court receivership over lack of proper health care and its overworked highways were rated second worst among the states in terms of maintenance (Lustig, 2010).

Consequently, the red ink began to flow again as the Great Recession began and the bottom fell out of revenues. The result has been horrendous slashing of budgets for schools, higher education, health and welfare and local government functions (Schrag, 2009). In the process, California’s overall budget has shrunk 20% to around $80 billion. Meanwhile, bonded debt has soared, much of it to paper over budget shortfalls, and California now has the greatest debt and worst bond rating of any state (Goldberg, 2010).

California is in a state of permanent crisis (Lustig, 2010). The state’s combination of harsh economic downturns and patched-up tax system makes the state fiscally dysfunctional. Other states suffer deficits, but none so persistent as those in the Golden State. The majority Democrats were stymied for years by the two-thirds majority required to pass budgets in the legislature, which Republicans have used to block any new revenues. This was finally rescinded by popular vote in 2010, but with a predicted $20–25 billion deficit in each of the next 5 years and the barrier of proposition 13, it is hard to see a way out.

Conclusions

California has had a leading role in the national—and even global—crisis of the Great Recession. It was by far the largest stage on which the US housing bubble and subprime madness played out. Sky-high housing prices combined with stagnant incomes to leave more households with unsustainable debt than in any other part of the country. Gross inequality made central city housing even more unaffordable, driving working class families to the urban fringe and amping up already unsustainable suburban sprawl. At its foundation, California’s industrial might—and position as the Great...
Hope of American technology—has become shakier, making it unable to underwrite job creation, sustainable urban expansion and middle-class ambitions for home ownership. And its massive fiscal crisis is a huge drag on the state’s—and the country’s—recovery from the Great Recession.

Recovery here, and in much of the country, is likely to be slow and prolonged, as is typically the case after a major financial debacle (Reinhart and Rogoff, 2009). Bankruptcies of households, businesses and banks will continue to flourish in 2010; bankrupts will not be spending much. Consumers with income will be paying down debt, suppressing aggregate consumption. Unemployment should remain high, with a largely jobless recovery. GDP growth is likely to be of the sputtering sort experienced by Japan since the 1990s. And the industrial base will continue to shrink in the face of global competition and domestic failure of investment and vision. The outlook is not pretty.

By contrast, the Asian economies are pulling out of the global crisis much more smartly than the USA. Their success proves, once again, certain truisms of economic policy if not of academic economics: the virtues of industrialization over financialization; rising income broadly distributed and development of the home market; savings and domestic investment; keeping a rein on aggregate debt; the role of the state and the public sector in economic affairs over pure free market ideology and, above all else, the importance of strategic economic vision and effective policy.

California is different from other states not just because of its size, but because it is more open to international trade, capital flows and immigration; it has a greater share of skilled occupations and labour-intensive services; and it provides the largest share of the ‘innovation pie’. But its sectoral and occupational composition, combined with its reliance on rampant urban growth (construction, real estate and finance), make its economy especially volatile and more susceptible to unequal sharing of gains. Then, there is the cultural burden of being on the cutting edge of economic, technological and cultural creativity—the urgency of blessing every generation with a new gold rush—that renders it particularly vulnerable to fads and bubbles. It is not surprising, therefore, that California played such a pivotal role in the four-fold nature of the Great Recession. Effective policy has to be equally multifaceted to bring economic revival and to cope with future economic volatility.

**Endnotes**

1 We refer to the famous novels of Ayn Rand, the goddess of neoliberalism and mentor to Alan Greenspan, who ruled over the US financial system during its greatest periods of ‘irrational exuberance’ in history.
The recycling of US dollars back into US treasuries and mortgage-backed securities by China and Japan and oil-producing countries also served to keep interest rates low.

Many observers have suggested that government policy making seems to have been captured by a financial oligarchy (Johnson and Kwak, 2010; Sorkin, 2009).

This appears to be a classic crisis of overaccumulation of capital—too much surplus chasing too few investment outlets (Brenner, 2006; Harvey, 2006).

For comparative figures, see Left Business Observer, #123, November 25, page 7. Also, the growth of federal debt has only just compensated for the precipitous fall in household debt (The Economist, 2009, 12).

In the 1980s, it featured Michael Milken and junk bond mania and landed Milken in jail (Bruck, 1989). Junk bonds and giant certificates of deposit fed the real estate lending craze by the savings and loans. California was home to, among others, Lincoln Savings (under Charles Keating, who ended up in prison) and to American Savings, briefly the biggest savings and loan in the country (Binstein and Bowden, 1993; Robinson, 1990).


More appropriate would be average prices, but we do not have reliable data on that variable for both the state and the nation going back over many years

Hawaii is the only state with higher average home prices. California moved out of the middle of the pack in the late 1960s and passed #3 Connecticut in the 1970s (US Census data).

Figures from the State Board of Equalization (from Los Angeles Times graphic on file).

Except Hawaii, the island state.

Data from www.hanleywood.com. Developers and financiers worked hand-in-glove, as in the way Countrywide financed almost all KB homes during the boom.

The leading cities for foreclosures were Las Vegas, Phoenix and Miami, plus California’s Stockton, Merced, Riverside-Ontario-San Bernardino, Modesto, Bakersfield and Vallejo-Fairfield. The order changed every quarter (Zumbrun, 2008, 2009). RealtyTrac, the largest dealer in foreclosures and main data source on home loss, is based in Irvine, California.


Relative to population size, several rust-belt states still have a larger share of manufacturing.


Service exports are limited by their customized production (by people with embedded knowledge), institutional and cultural specificity, and lack of economies of scale and scope. Furthermore, exports are often followed by direct investment to provide the services on the ground with local talent.

Acknowledgements

The authors wish to thank the Institute for Research on Labor and Employment at the University of California, Berkeley, for institutional support for this paper.

References


