A SOCIAL STRUCTURE OF ACCUMULATION FOR LONG WAVE UPSWING IN AUSTRALIA?

Phillip Anthony O'Hara

In recent years there has been a tendency in the popular press, in political debate and in some scholarly papers to talk of an 'Australian economic miracle' or 'the booming Australian economy'. So common are these recitations that they have become embedded in the popular conscience. Some contributors to this special issue of the *Journal of Australian Political Economy* implicitly endorse this view of a 'miracle economy'; often using GDP growth rather than GDP *per capita* growth as the crucial proxy. Much is made of the contribution of changes in policy, renewed enterprise, and the "resources boom" to this apparently buoyant state of affairs. In this light, it is encouraging to see some scholars critically evaluating these pronouncements of a "boom". Tom Bramble (2004), for instance, in an earlier article from this journal, rightly seeks to balance the debate by discussing some of the major contradictory processes impinging on this so-called miracle economy. Special emphasis is given to the contradictions of labour force polarisation, lacklustre performance of the global economy, household debt and potential speculative collapse, external account problems, plus ideological contradictions.

This current article also seeks to demystify this "miraculous and booming economy", through an empirico-institutional analysis of the long-term performance of the Australian economy within a global setting. Special reference is given to whether Australia has been going through long wave upswing or downswing over recent decades, and whether suitable social structures of accumulation are currently in place to propel sustainable growth in the long-term. The article has three main

sections. The first sets out the basic theory underlying social structures of accumulation. Next the contours of Australia's institutional structure and dynamics are discussed, especially as they relate to the process of capital accumulation, capital-labour relations, capital-state interactions and industry-finance linkages. The third section examines in some detail the main performance measures over the past few decades, set in a broader historical context of long-term motion. Indicators such as *per capita* growth, productivity, investment and rate of profit are examined; as well as broader measures such as trust and genuine progress. The conclusion summarises and outlines the likely prognosis of SSA─long wave motion into the future.

Social Structure of Accumulation Theory

Social structure of accumulation (SSA) theory posits three main propositions.[1] The first is that long-term socioeconomic performance under capitalism is affected by institutions - those durable structures, outside the direct control of individual firms, which condition the process of capital accumulation, relationships between industrial and financial capitals, capital and labor, capital and the state, and nation-state set within the global economy. Long term investment, demand and growth are affected by levels of confidence, stability, conflict resolution and coordination of activities. These public goods fundamentally condition the rate of long-term performance. For this reason we outline the dominant institutional clusters and relationships impacting on Australia's long-term performance.

The second hypothesis is that SSAs undergo evolutionary transformation through historical time, as the institutions develop, reproduce, mature

1 The SSA approach started with the work of David M. Gordon (1978, 1980), followed by the collective work of Gordon, Bowles and Weisskopf; (see Bowles 1990); Gordon, Edwards and Reich (1982); and then many other studies by writers such as David Kotz, Terrence McDonough, Victor Lippit, Phillip O'Hara and Martin Wolfson. (See McDonough *et al* 2006 and O'Hara 2006a for recent work.) This current work is the first published paper relating SSAs specifically to the contemporary Australia scene. For links between SSA theory and other innovative elements of contemporary political economy see O'Hara (2007a, 2007b).

and decline; and then potentially undergo transformation and renewal. Institutional clusters are thus subject to change and metamorphosis as their potential to generate system-functions propelling long-term growth evolves through time. It is critical to emphasise that SSA theory posits no deterministic forms of change, such as rigid periodicities or amplitudes, but simply that durable institutional structures undergo metamorphosis through long movements ("waves") of dynamic formation and demise. Following this historical pattern of change is the critical thing for SSA empirics, as path-dependent processes impact on the political economy.

Thirdly, SSA theory differentiates between high, medium and low rates of *per capita* GDP growth, as well as between GDP and broader socioeconomic variables. It seeks to critically evaluate the performance of capitalist economies according to whether they are undergoing long wave upswing (above 2.5 percent GDP growth *per capita* over at least 15 years); mixed results (between 2.01 and 2.5 percent growth *per capita*); and long wave downswing (below 2.01 percent growth *per capita*). SSA empirics link GDP to investment, productivity and profit rate; as well as broader social and environmental patterns of change.

Institutional Dynamics of the Australian Political Economy

We need now to identify the dominant institutions of the Australian political economy as it relates to accumulation and growth. There are five major planks of the Australian institutional environment, relevant to long-term socioeconomic conditions. These planks include (a) a belief in relatively small government, (b) a deregulated financial system, (c) a deregulated labour market, (d) free trade and openness to international capital, (e) a neo-conservative coalition of the willing, and (f) neoliberal development philosophy.

First, there is *a belief in small government*. The neoliberal consensus posits the need to reduce the size of government to a far smaller percentage of GDP than was typical in the postwar era of the 1960s and early 1970s. It seeks to privatize government enterprises, reduce red tape, and increase corporate self-governance. One justification for this is that

governance functions can be performed by other institutions such as corporations, non-government organizations, and communities. A second justification is the belief that there has been too much governance, especially during the 1960s and early to mid 1970s, and that a decline in quasi-public goods is in order.[2]

Australia has joined the global trend of selling off public corporations such as gas, water, telecommunication, electricity and banking institutions to the private sector.[3] It has looked to private corporations to administer some prisons and encouraged private-sector universities where none existed before. It has also looked to the private sector for cleaning, security, and even research to assist in government departments. Legislation has attempted to reduce red tape; to cut business paperwork and administrative costs previously required by government for information, regulatory, and policy purposes. And attempts have been made to increase the extent to which private sector corporate watchdogs and corporations themselves administer and oversee company practices concerning auditing, accounting, and financing; with some moderate attempts by the state to reduce corruption, corporate excesses and monopoly.

Secondly, as part of the neoliberal agenda, Australia has, especially since the 1980s, attempted to *deregulate the domestic financial system* through a series of institutional changes. Controls over interest rates on cheque accounts, mortgages, and corporate and consumer loans were terminated. This was based on the belief that controls hurt those who can least gain access to finance by reducing the overall availability of finance. Monetary authorities also ceased to use variable reserve requirements to control the money supply. Instead, open market operations (the buying

2 Attempts to reduce state spending in some cases have not been very effective. Although neoliberalism seeks to reduce the size of government, certain critical state expenses and lower economic growth tend often to maintain such spending during long wave downswing. Neoliberalism in some cases may thus lead to changes in the composition of state spending—from productive to less productive activities. (See details later in this paper.) For some material on neoliberalism in Australia, see, for instance, Winton Higgins (2006) and Philip Mendes (2003).

3 For instance, Lynne Chester (2007) has undertaken an empirical study showing that the restructuring of the Australian electricity industry has resulted in high prices for consumers and greater profits for business; with the vested interests of industrial, financial and fictitious capitals gaining the most.

and selling of mostly government securities) have become the established way of controlling economic activity. Moreover, monetary policy became the main discretionary means used by central banks/governments to direct economic activity in the pursuit of stable prices (see Bakir 2004, Mavroudeas and Papadatas 2008); fiscal policy has declined in relative importance.

The third plank of Australia's institutional apparatus has been to *deregulate the labour market* through reforming industrial relations. Radical, liberal, and conservative economists all believed that during the late 1960s and early to mid-1970s workers expanded their power relative to capital; the wage share of national income rose to high levels; and productivity declined markedly. The neoliberal response to this was to try to increase the power of capital by de-instituting minimum wages, expanding workplace agreements, including privacy clauses in union voting, encouraging non-union and no-strike clauses in labour agreements, and increasing the flexibility of wages and working conditions. The main objective of these policies is to re-establish the power, profitability and viability of individual corporations so as to increase growth and accumulation.[4]

The fourth plank of Australia's institutional environment has been to *free up international capital* so the global circuits of social capital can expand. This was done by promoting the free movement of money, production and trade worldwide. In the mid-1990s the World Trade Organization was established to reduce tariffs and subsidies so that not only products but also services could be traded more freely in the global economy. The protection of intellectual property rights is slowly being

4 Conservative and radical economists had different responses to the perceived increase in the power of labor over capital. Conservative or neoliberal economists wanted to reduce the power of labor, while radicals saw an opportunity to develop an alternative economic policy based on democratic governance programs. For instance, Bowles, Gordon & Weisskopf (1990:233) proposed policies to reduce corporate waste, expand community knowledge and skills, and promote human rights and democratic participation through the economy. As they say: "We are committed to an economy that would offer sustainable improvements in living standards, strong democracy and community at home and global cooperation abroad, and more extensive economic fairness." For material on Australian industrial relations deregulation see the special issue of the *Journal of Australian Political Economy* Dec 2005 (*e.g.,* King and Stilwell 2005).

enhanced by including China and the former Eastern Block in the system of agreements. And some very minimal attempts were made to include underdeveloped nations by putting agricultural reform on the agenda. These multilateral agreements were designed to enhance free trade regionally and globally. Several regional economic alliances were formed as well, including the North American Free Trade Area, the European Union, Asia-Pacific Economic Cooperation, and the fledgling Free Trade Area of the Americas. Unilateral changes have also assisted in promoting free trade.

Just as critical to the neoliberal agenda has been the freer movement of capital (especially in developed nations) through flexible exchange rates, reducing capital controls, and more uniform taxation at lower rates (especially for corporations and the rich). These changes let money capital move more freely to those areas and activities with the highest rate of return and where innovations could be implemented without hindrance. The essence of capitalism is said to be inherent change, dynamic innovation, and a world without barriers to doing business. Only in a system free of restrictions to the movement of money capital could investment ─ it is thought ─ enhance global profit and growth. Reduced taxation and greater tax uniformity is consistent with this enhanced free flow of foreign and domestic capital.[5]

A fifth plank of Australia's institutional environment concerns *international relations and global development*. With the supposed decline of US hegemony in the late 1960s and the 1970s, many believed that global public goods could best be established by military policies and foreign relations aimed at a new global system of power. The new policy aims to re-establish US imperial power in the interests of global corporations and finance capital. Hence, in the post-cold-war era, the neo-conservatives in Washington and its allies sought to attack (at least verbally, sometimes militarily) anti-US regimes in Iraq, Iran and North Korea (the "axis of evil"), as well as (in practice) "terrorist" forces such as the Taliban, al Qaida, and Hamas (via the Israeli military).

5 On the Australian connection for this international financial deregulation trend see Dick Bryan and Michael Rafferty (1999) and Heribert Dieter (2006).

Renewed US power is thought to help establish a new pro-corporate global system with stable property rights and greater security. Such a system, to a considerable degree, transcends the United Nations, certain global protocols (such as the Kyoto Agreement on climate change) and the International Criminal Court, in favour of US power and authority. Australia has been a part of this neoconservative alliance and the "coalition of the willing" (see O'Hara 2004, Doran 2007).

The same neoliberal (and neoconservative) principles are imposed on Africa, South and Central America, Central and Eastern Europe, the Middle East and Asia. It is thought that development will only occur where flexible markets and free trade are allowed to stimulate the entrepreneurial spirit. No major stimulus is needed to promote development except the freedom of private capital to emerge spontaneously from an environment conducive to private initiative and accumulation.

In short, for the sixth plank, the neoliberal *development* philosophy is no different from neoliberal *general philosophy*. So, a uniform policy framework is imposed on all nations, regardless of history, government and culture. It is not necessary to understand each nation's experience, so the argument goes, since "one size fits all". A system of individual and corporate property rights is necessary to lay the groundwork for business enterprise. A system of contract, accounting, and private rules and guidelines provides the basis for a spirit of enterprise. Regulations on business need to be dismantled for the bourgeoning business class to emerge and become dominant.

These six planks form the basis of Australia's institutional environment over recent decades. They have been responses to the deteriorating global economic environment of the 1970s. Some challenges have emerged to neoliberalism (see O'Hara 2006: ch 10), but these neo-conservative institutions are still dominant in Australia, and have been ongoing over recent decades. The question is whether these policies have had a positive impact on the economic performance of the Australian economy. It is also critical to assess the potential of such policies to enhance performance into the future.

Long-Term Economic Performance and Contradictions

The institutional environment examined in the previous section is well in place, in large measure; but this does not necessarily mean that a suitable macro social structure of accumulation is operational. Indeed, the institutional environment may be well in place without promoting long-term accumulation and growth. (The question of an SSA for capitalist development is independent of whether the institutional environment is progressive in a socialist or communitarian sense.) To gain insight into the degree that the institutions support long wave upswing (for capitalist development) we examine in some detail the record of accumulation and growth for Australia as part of the world-system, and then supplement this with broader measures of long wave upswing.

Long wave theory is the philosophy that capitalism undergoes long movements in core performance, including upswing and downswing, beyond simply business cycles. For instance, during the 1950s, 1960s and early 1970s, the core capitalist economies mostly underwent rapid accumulation, as did the world economy as a whole. The United States and Europe were at the core of this motion, while settler countries like Australia and Canada tended to be consistent with much of the motion. Sub-Saharan Africa, Latin America and Asia did not constitute the core of this motion. The system of global Fordism provided a foundation for twenty five years of rapid accumulation and growth, especially for most of the advanced capitalist economies.

This accumulation regime, however, was seen to break down into the 1970s through to the early 2000s. During this period of global neoliberalism, growth and accumulation faltered, especially in the core capitalist economies, along with Sub-Saharan Africa and Latin America. While the world economy as a whole underwent long wave downswing, many parts of Asia reversed their trend and underwent long wave upswing. Thus the core-periphery dynamics of global capitalism saw the mature and most underdeveloped regions decline into the 1970s-2000s while Asia underwent long wave upswing.

The question arises as to how Australia fits into this pattern. Did it follow the advanced capitalist economies through upswing and downswing, or

did its pattern deviate? Has Australia managed to undergo long wave upswing into the 1990s and 2000s as it progresses along with the emerging economies of Asia, to which it has strong economic ties of trade, commerce and production? We turn now to the record, the need to situate Australia within the framework of global patterns of growth and accumulation. First, Table 1 shows the record for GDP *per capita* growth on a world scale.[6]

Table 1: Real GDP *Per Capita* Growth: World and Regions, 1950-2005, Period Annual Averages

Region	1950-73	1950-59	1961-69	1970-79	1980-89	1990-99	2000-05
World	2.93	3.20	3.38	2.08	1.27	1.24	1.73
Australia	2.34	1.89	3.44	1.43	1.93	2.15	1.78
East Asia Pacific	n.a.	n.a.	1.60	5.02	6.02	6.82	7.21
South Asia	n.a.	n.a.	1.81	0.61	3.42	3.32	4.33
USA	2.5	2.87	2.94	2.26	2.11	1.87	1.68
Western Europe	4.1	n.a.	5.37	3.17	2.02	1.67	1.24
SSA	2.02	n.a.	1.67	1.18	-0.76	-0.54	1.84
Latin America	2.67	n.a.	2.64	3.12	0.35	1.32	1.24
Middle East & NA	4.73	n.a	5.90	3.08	-0.72	2.00	1.96

Source: Adapted from O'Hara (2007c), Maddison (2007), Foster & Stewart (1991)
n.a. = not available

Long wave theory is based on the idea that economies undergo evolutionary transformations through time, especially varying degrees of durable growth. These patterns of long wave upswing and downswing are not deterministic, but they do, nevertheless, seem to be fairly durable through historical time.

A long wave upswing is defined as a long term pattern of high growth (above 2.5 percent *per capita*), divided into 'low' wave upswing (2.51-3.0) and 'high' upswing (above 3.0). Long wave downswing, on the other hand, is where the pattern of *per capita* growth is low, at or below

6 It is necessary to emphasise that we are examining the growth of real GDP growth *per capita* throughout this paper, which gives a far better indicator of growth than simply real GDP growth. *Per capita* allows one to look at the proportionate real growth per person. Many studies, especially those done by the IMF, tend to use rates that are not *per capita*, which distorts the results. The World Bank, on the other hand, does tend to use *per capita* estimates, which is to be condoned.

2.0 percent over longish periods; there are varying intensities of downswing from positive to negative growth. In between these upswings and downswings are intervals of 'mixed results', between 2.01 and 2.5 percent growth, where there is potential transition toward downswing or upswing. These are 'mixed results' since growth is not sufficient for upswing and too high for downswing. Also, long waves are only defined as such when at least 15 years of relatively consistent growth patterns are evident; hence one decade of such growth can be classed only as a 'short wave'.

Thus the following taxonomy is used in this paper:

Long Wave Phases: Growth of Real GDP *Per Capita*
Major Upswing: Greater than 3.0
Upswing: 2.51 and above
Mixed Result (Borderline): between 2.01 & 2.5
Downswing: 2.0 and less
Major Downswing: Less than 1.0
Long Wave Upswing/Downswing: consistent dynamics for at least 15 years
Short Wave Upswing/Downswing: consistent dynamics for at least 10 years

There are some surprising results here, especially for Australia. Two stand out. The first is that Australia never underwent sustained long wave upswing in the 1950s *and* 1960s. Rather, the 1950s was a period of weak *per capita* growth, while the 1960s was the only postwar decade of rapid growth. This means that Australia underwent a (short-wave?) downswing in the 1950s, and a short-wave upswing in the 1960s.

The second important result is that the whole period since the 1960s has seen a sustained long wave downswing; except for a 'mixed result' during the 1990s. This underlies the weakness of Australia's economic performance for most of the period studied.

Table 2: Long Wave Dynamics: World and Regions, 1950-2005[7]

Region	Long Wave Upswing	Short-Wave Upswing	'Mixed Results'	Long Wave Downswing	Short-Wave Downswing
World	1950s→60s		1970s	1980s→00s	
Australia		1960s	1990s	1970s→80s, 2000s	1950s
East Asia/ Pacific	1970s→00s				1960s
Sth Asia	1980s→00s			1960s→70s	
USA	1950s→60s		1970s→80s	1990s→00s	
Europe	1950s→70s			1980s→00s	
SSA	1950s			1960s→00s	
Latin America	1950s→70s			1980s→00s	
MENA	1950s→70s			1980s→00s	

Note: We have assessed long waves by, among other things, taking into account the data in Table 1 for 1950-1973 when data is missing for the 1950s.

The second is that Australia has not benefited as much as expected from the East Asia long wave upswing. It seems that the 'booming' conditions of parts of Australia have not trickled down to the country as a whole; and that Australia's 'economic boom' has been exaggerated. For instance, *per capita* real gross state income growth varies greatly during 2000-2007, from a massive annual average 6.25 percent for Western Australia and a quite high rate of 3.13 for New South Wales (very short wave upswing); moderate rates of 2.48 for Queensland and 2.16 for South Australia (mixed results); and very poor results of 1.43 for Victoria and 0.46 for Tasmania (very short wave downswing) (ABS 2007b).[8]

7 Typically, despite these general conclusions of long wave downswing for all areas except Asia, specific isolated nations do appear to be undergoing sustainable long-term high *per capita* growth (long wave upswing). These include, for instance, Ireland with an average annual *per capita* growth of 5.2 percent (1975-2004) and 7.3 percent (1990-2004); Chile with 3.9 percent (1975-2004) and 3.7 percent (1990-2004); Botswana with 5.7 percent (1975-2004) and 4.2 (1990-2004); Mozambique with 2.6 percent (1975-2004) and 4.2 percent (1990-2004); and some which barely made it above the "mixed result", such as Norway, with 2.6 percent (1975-2004) and 2.5 (1990-2004). (UNDP 2006, pp. 331-334).

8 This reference to long wave motion for the states is purely short-hand language, and does not mean to imply that long waves motion necessarily operates for the states, as distinct from the national (or global) economy. The hypothesis of state-

Further details about the nature of Australia's economic performance over recent decades are necessary. Next we investigate data on investment and productivity as it compares with growth: see Table 3, below:

Table 3: Investment, Productivity and Growth. Australia, 1950s-2000s. Decade Annual Averages

Years	Real Investment Growth Rate (private)	Labour Productivity*[9]	Real GDP Growth *per capita*
1950-59	6.42**	n.a.	1.89**
1960-69	7.43**	2.73	3.44
1970-79	2.38	2.21	1.43
1980-89	4.67	1.75	1.93
1990-99	3.99	2.72	2.15
2000-05	5.49	2.10	1.78

Source: Adapted from World Bank (2007), *PC (2007), ** Foster & Stewart (1991)
n.a. = not available.

The clear message of this table is that growth, investment and productivity were all relatively high in the 1960s. However, this fell off into the 1970s and continued through to the 1980s and 1990s. While there has been a revival of productivity in the 1990s, and investment into the 2000s, this has not significantly affected growth *per capita*, and productivity diminished somewhat during the 2000s.

Now we examine Australia's performance for the (after-tax and after-interest payments) rate of profit, along with its major determinants such as the organic composition of capital and rate of surplus value (exploitation), compared with growth *per capita.* The data is shown in Table 4 on the following page:

wide long waves and SSAs, however, is an interesting one which has to date never been explored.

9 The labor productivity year-categories are as follows: 1960s is for the period 1964/65-1973/74; 1970s is for the period 1973/74-1981-82; 1980s is for 1981/82-1988/89, 1990s is for 1988/89-1998/99, and 2000s is for the period 2000-2005 (PC 2007).

Table 4: Profit Rate, Organic Composition, Surplus Value and GDP *Per Capita*. Decade Annual Averages, Australia, 1960-2006[10]

	1960-69	1970-79	1980-89	1990-99	2000-07
Rate of Profit [s/c+v] x [100]	5.5%	3.3%	3.0%	4.0%	4.5%
Organic Composition of Capital [c/v]*	1.73	1.94	2.32	2.29	2.21
Rate of Surplus Value [s/v] *x* [100]	15.0%	10.1%	10.1%	13.3%	13.6%
GDP Growth *Per capita*	3.44	1.43	1.93	2.15	1.78

Source: Adapted from Mason (2007:63).

Here the rate of profit is shown to be high in the 1960s but declining significantly into the 1970s and 1980s. A modest recovery occurred in the 1990s, with further improvement into the 2000s. But even these increases have not re-established the profit rates of the 1960s. There were profit rate declines into the 1970s and 1980s due to a lower rate of exploitation and an increase in the organic composition of capital; due to the relative inability to extract labour from workers and an increase in depreciation and energy costs.

The modest increase in profit rate into the 1990s, and further improvement in the 2000s, was due to a higher rate of exploitation (as capital increased its power relative to labour) as well as reductions in the cost of new technology (somewhat lower organic composition). These changes occurred in tandem with the labour market being progressively deregulated and greater competition stimulating new technology, but with cost savings as the value of constant capital declined. These changes have been positive for the interests of capital, but not manifestly improving real growth *per capita* in any major way.

10 The rate of profit, which is surplus value (s) divided by constant and variable capital (c+v), is calculated here after the payment of taxes and interest charges. The organic composition of capital, which is constant divided by variable capital, is a stock variable, while the rate of surplus value is surplus value divided by variable capital. It is assumed, as is often done, that the variables are approximated by money (i.e., national accounts) as all variables need to be realised through exchange while becoming effective through the circuit of social capital. A transformation procedure is thus not required.

Some of the institutional contradictions contributing to relatively poor performance become obvious when GDP is disaggregated according its principal components of investment, consumption, and net exports. Table 5 below shows that net exports have exerted a negative direct impact on the Australian economy, as most decades have seen deficits in the trade account.

Table 5: Total Investment, Consumption & Net Exports, Percent of GDP, Decade Annual Averages, Australia, 1960s-2000s

	1960-69	1970-79	1980-89	1990-99	2000-06
∑I/GDP	29.84	27.54	26.81	23.41	24.60
∑C/GDP	71.11	72.38	76.00	77.31	76.59
∑Xn/GDP	−0.12	0.028	−1.85	−0.785	−1.46
Stat Disc, ΔInvent, etc	−0.83	0.052	−0.96	0.065	0.27
	100.00	100.00	100.00	100.00	100.00

Source: Adapted from ABS Cat. 5206.0 (2007a)

Such deficits have been common in the 1980s through to the 2000s. At a narrow level, this illustrates that the inability of Australia to compete on the world economy, and more especially its greater level of imports compared with exports, has negatively impacted on growth. At a wider level, the negative net exports demonstrate that a low level of world income and excess competition have been adversely affecting most nations, including Australia.

Another contradiction is the major drop in investment share of GDP—including business, households and government investment—which has inhibited the emergence of a viable regime of accumulation or SSA. UNCTAD (2003:68), for instance, maintains that a nation generally requires the investment share of GDP to be above 25 percent for regimes of accumulation to *begin* to develop. Australia's total investment share has dropped from around 30 percent during the 1960s short wave upswing through to just *under* 25 percent in the 2000s. This shows that the process of investment has been insufficiently building up assets that provide a flow of services into the long term. Durable assets have been deteriorating while investment has been insufficient to propel a new wave of economic growth and accumulation.

The vast majority of the aggregate demand has been spent on the *consumption* of assets and the provision of services that provide no long-term regime of accumulation. The accumulation instinct is insufficiently developed, partly because Australia is not an active player in the global production networks and commodity chains; and partly due to the low state of world demand and excess competition. Table 6 provides information to help assess further the sources of the problem.

Table 6: Government (GI) and Private Investment (PI), Percent of GDP, Decade Annual Averages. Australia 1960s-2000s

	1960-69	1970-79	1980-89	1990-99	2000-06
GI/GDP	7.69	7.44	6.82	4.49	3.75
PI/GDP	22.18	20.10	19.98	18.64	20.85

Source: Adapted from ABS Cat 5206.0 (2007a)

In common with many other nations, Australia has been running down its stock of public assets since the 1970s and 1980s. The public investment share of GDP has declined quite dramatically from just less than 8 percent (1960s) to under 4 percent (2000s). This reflects the diminishing priority given to government investment into electricity, gas, communications, infrastructure, education and health over recent decades. Numerous empirical studies have demonstrated the shift from productive to unproductive government spending negatively impacting on productive private investment. Productive government spending tends to crowd-in private investment, while unproductive provision of transfer payments for subsides and handouts crowd-out private investment. Thus, Australia—along with the US, UK and others—has insufficiently built a *public* regime of accumulation for long-term investment.[11]

11 There are dozens of interesting studies for numerous nations and areas on the tendency for public capital to crowd-in private investment, while spending by government on subsides and transfers tend to be unproductive in this sense. See O'Hara (2006:ch10) for details of these studies. Studies for Australia tend to support the conclusion that public capital crowds-in private investment, and that the recent decline in public capital has reduced private investment by about half the decline (see, for instance, Song 2002).

The private investment share of GDP also fell considerably from the 1960s through to the 1970s, 1980s and 1990s. The private investment share of GDP declined from over 22 percent of GDP through to over 18 percent of GDP. This very low level of private investment is insufficiently building a regime of accumulation, due to low world aggregate demand, unproductive government capital, insufficient network ties to global business, and a shift in corporate objectives.

The last of these factors—shift in objectives—is linked to the change from the 1960s when corporations tended to seek growth, through to the latter emphasis on shareholder value. The shift from growth to share market is a major change in the workings of the corporate economy, which has resulted in a movement of funds from investment in productive capital to the buying and selling of shares in the financial system. In this, Australia has been following the lead of the USA and UK in developing share market capital rather than productive capital (see O'Hara 2006a:chs 2,3,8). This rise in fictitious capital has to some degree diverted resources into relatively unproductive areas at the expense of durable capital investment (contributing to a decline in inflation). As a result, there has been an insufficient construction of a *private-sector* regime of accumulation for long-term investment. (Some significant increase in private investment share occurred in the early-mid 2000s, but this has yet to impact significantly on real GDP growth *per capita*, and the trend may be transitory.)

Social and Environmental Performance

So far we have found that Australia does not have a well-established set of institutions for a durable and efficient macro social structure of accumulation. The institutional contradictions are quite strong. Australia seems to have joined the USA and most of Europe through a period of maturation devoid of robust accumulation dynamics. *Per capita* growth is relatively mediocre, as is investment, productivity and profit rate. Long wave downswing commenced into the 1970s, and then continued, along with some 'mixed results', through the 1980s, 1990s and 2000s. Some evidence indicates a moderate rebounding of performance during the

1990s and 2000s and, while positive, it is not adequate at this stage for a truly long wave upswing to emerge.

It is time to present further evidence of long wave motion from 'economic' to 'social and environmental' contradictions. Two pieces of data are included here; the first relating to levels of trust in society; and the second the Genuine Progress Indicator (GPI).

Trust has been shown to be critical to the workings of the economy. Trust is linked to social capital, the durable structures that provide mostly non-market services to people, related to forms of reciprocity. It has been linked to higher levels of investment, quality of life and social solidarity (Ostrom and Ahn 2003). Neoliberal societies have tended to establish relationships whereby trust has declined. This is because people are working harder, and studying more, but having fewer community, family and friendship associations beyond workplace and educational institutions. The World Values Survey includes questions of 'trust' in their social surveys, which have been ongoing over the past twenty five years. Such data for Australia is shown below in Table 7:

Table 7: Levels of Trust in Australia, 1980, 1995

	1980	1995	% Change
General Social Trust	47.8	39.9	−16.5%
Major Businesses	78.0	56.3	−27.8%
Justice System	60.1	34.4	−42.7%
Parliament	54.8	29.9	−45.4%

Source: Adapted from the EVSG/WVSA (2006), SSA (2007)

This evidence shows a considerable drop in levels of trust for the general social fabric; significantly more deterioration in trust for business; and a massive drop for the justice system and parliament. This drop in trust is a major social problem, which has ramifications for the political economy in terms of increases in transaction costs, fewer associative communication efforts, and a decline in the quality of life. It indicates that people are more likely to communicate along market lines, as well as through more distant channels such as the internet. There has thus been a switch of transactions from community, society, and family to market linkages, corporate relationships and distant electronic forms. While this

enhances GDP, at least potentially, it also has negative effects on social performance through reducing informal and more intimate linkages, relationships and resources.[12]

Another indicator relevant to long term trends in the social economy is an assessment of the Genuine Progress Indicator (GPI). The GPI is an alternative measure of performance useful to compare with GDP. Included in the GPI is consumption, plus changes in voluntary labour, social indicators, and environmental factors. Table 8 compares GPI with GDP real growth *per capita* for three periods over 1986-2003:

Table 8: GDP and GPI, Growth Rate, *Per Capita*, Australia, 1986-2003

Years	GDP Annual Average Rate of Change	GPI Annual Average Rate of Change	GPI minus GDP Growth Rates
1986-1990	+2.21%	+1.85%	−0.36
1990-2000	+2.11%	+0.40%	−1.71
2000-2003	+1.65%	+1.26%	−0.39
1986-2003	+2.05%	+0.89%	−1.16

Source: Adapted from Lawn & Clarke (2006:120)

The poor GDP growth figures under-estimate the extent of long-wave downswing and insufficient SSA development. During the late 1980s real GDP growth *per capita* rose by an average rate of 2.21%, while real progress rose by only 1.85%; with GDP growth thus over-estimating progress by 0.36 percentage points per annum. The 1990s saw average annual GDP growth of 2.11%, compared with real progress of only 0.40; with GDP growth over-estimating progress by a massive 1.71 percentage points per annum. The early 2000s saw GDP growth per annum rising by 2.05%, compared with real progress of 0.89%; with GDP over-estimating progress by 1.16 percentage points on average each year. For the whole period, 1986-2003, GDP growth per annum grew an average 2.05%, compared with real progress of only 0.89%; with GDP growth over-

12 It is regrettable that Australian researchers were not included, or did not choose to take part, in the 1999 and 2005 World Values Surveys; hence we have no date for these years. Nevertheless, other sources indicate that the trend to lowers levels of trust has continued.

estimating progress by 1.16 percentage points (57%) on average per annum.

These figures indicate that if material growth is reconstituted on the basis of social and environmental indicators then the long wave conditions of the 1980s, 1990s and 2000s were far worse than earlier estimated. GPI is worse than GDP due to declining social and environmental resources; such as problematic distribution of income, air pollution, destruction of ecological capital and the cost of underemployment (see Clarke and Lawn 2007 for details).

If an 'economic' (GDP) long wave downswing or (at times) 'mixed result', of a moderate degree, occurred during this (1980s-2000s) period then 'social and environmental' (GPI) long wave downswing is more marked. These further results illustrate that the underlying long wave conditions are fundamentally contradictory—troublesome for GDP and much more so GPI.

A longer-term analysis of GDP-GPI relationships typically shows that both increased substantially during the long wave upswing of the 1960s, but since then GDP growth has moderated, while GPI growth has crashed, in some years being negative (Lawn and Clarke 2006). This illustrates that the long wave downswing of the 1970s-2000s is more problematic than indicated at first glance. This reinforces the message of the theory of the disembedded economy and destructive creation that what weak growth of the economy has been experienced has been at the expense of social and ecological assets. This trade-off between durable fixed capital (business capital) and social and ecological assets (community capital) is less obvious for Australia than for the United States and some other nations; but some degree of trade-off is nonetheless operational.[13]

13 This is alluding to the vast literature on the multiple capital paradigm, including durable fixed capital, human capital, social capital, ecological, plus others such as body capital, familial capital, and so on. This paradigm is generating a revolution in economics, and has the potential for being progressive in its social and political implications. For instance, it shows that sometimes GDP *per capita* growth can be positively related to social capital (*eg*. through SSAs), while in other scenarios the two can be negatively related. An example of the latter is that business capital can expand by subsuming/destroying social and ecological capitals. Indeed, this is

Conclusion

This article has examined the question of social structures of accumulation and long waves in Australia over past several decades. We detailed the dominant institutions associated with the current functioning of the Australian economy, and found the (neoliberal) institutional structure to be well in place. However, a relatively durable institutional apparatus does not necessarily translate into a viable macro regime of accumulation or social structure of accumulation. This was found to be very much the case, as the short run long wave upswing of the 1960s evolved into the long wave downswing (or 'mixed result') of the 1970s-2000s.

Much talk is made of a boom in the Australian economy into the 1990s and 2000s. However, the evidence does not support a boom. A modest-to-moderate recovery was noted for the 1990s and 2000s after-tax-and-interest rate of profit, productivity, investment and rate of surplus value; but this recovery has not translated into GDP growth *per capita*. Long wave downswing is even more apparent when levels of trust and 'genuine progress' are scrutinised, due to social costs and environmental destruction. Overall, long wave downswing is firmly in place in the Australian political economy as the economic, social and environmental contradictions are quite strong. There are, as shown, considerable regional differences in this pattern from state to state; such as the huge 2000s growth in Western Australia, relatively strong growth in New South Wales; moderate-medium growth in Queensland and South Australia; and weak to very weak growth in Victoria and Tasmania.

It may well be that most Western economies underwent high rates of growth in the 1950s, 1960s and early 1970s as a result of forces of an historical nature that may not be re-emerging anytime soon (if ever). Mostly they have fallen into industrial maturity, with a large service sector, less volatility (perhaps) than in the 1970s and 1980s, but with low growth *per capita* and a small investment share of GDP. The world is turning towards Asia, especially China, as the region and many of its

---

what has been happening over the past few decades at least, in many nations of the world. The Scandinavian nations seem to have a more progressive experience with social and ecological assets. (See O'Hara 2001 on this multiple capital paradigm.)

nations undergo massive industrialization and long wave upswing (see O'Hara 2006b). The Asian boom does not necessarily have a major impact on the wider region, in an environment of low world income *per capita*, excess competition and periodic speculative bubbles.

This turn towards maturity and institutional sclerosis for Australia may turn out to be positive from a social and environmental point of view. So long as population growth is moderate there may be less urgency for growth in already high GDP *per capita level* nations. Unemployment can perhaps continue to be moderate as population growth declines; if immigration moderates; and social and environmental objectives rise. We may thus see a movement to a post-neoliberal system of governance as we seek to eschew global warming and social fragmentation, and elect more 'liberal' or social democratic administrations. In the process the rise of new environmental technologies, energy sources, and social initiatives may well provide a framework for a new long wave upswing, of a progressive nature. Long waves of alternative industrial, social and ecological capitals may be on the horizon if a progressive SSA is successful in the future. This is the most upbeat possibility imaginable if we are to explore optimistic futures. The other alternative may well be a continuation of poorly growing traditional capitalist economy with few successes of a business nature compared with those of the Asian nations.

Phil O'Hara is Director of the Global Political Economy Research Unit (GPERU), Economics Department, Curtin University, Perth.

philohara1@yahoo.com

The author wishes to thank the inspiration and encouragement, over many decades, provided by David M. Gordon (1944-1996), Ernest Mandel (1923-1995), Ted Wheelwright (1921-2007), Dale Bush, Bill Dugger, Allen Oakley, Howard Sherman and Ron Stanfield, who taught me, through their writings and personal discussions, much of what I know about institutions, political economy and evolutionary transformation. This article is dedicated to them. He also wishes to thank the two referees and editors from this journal for comments on an earlier version of the paper; as well as Andrew Brennan and Dana Mason from GPERU for bibliographical and statistical assistance.

References

Australian Bureau of Statistics. (ABS) (2007a) *Gross Domestic Product Estimates. 1959/60-2005/06*. Canberra, Australia. Cat. No. 5206.0

Australian Bureau of Statistics. (ABS) (2007b) *Australian National Accounts—State Accounts, 2006-07*. Canberra, Australia: ABS. Cat. No. 5220.0

Bakir, Caner. (2004) "Bank Power and Public Resistance to Mega Bank Mergers", *Journal of Australian Political Economy*, Number 54, December, pp. 67-93.

Bowles, Samuel and Richard Edwards. (1990) (Eds) *Radical Political Economy.* Aldershot and Northampton: Edward Elgar.

Bowles, Samuel; David M. Gordon and Thomas E. Weisskopf. (1990) *After the Wasteland: A Democratic Economics for the Year 2000*. Armonke, NY: M.E. Sharpe Inc.

Bramble, Tom. (2004) "Contradictions in Australia's 'Miracle Economy'", *Journal of Australian Political Economy,* Number 54, December, pp. 5-31.

Bryan, Dick and Michael Rafferty. (1999) *The Global Economy in Australia: Global Integration and National Economic Policy*. Sydney: Allen & Unwin.

Chester, Lynne. (2007) Who Benefits from the Restructuring of the Australian Electricity Sector?", *Journal of Economic Issues,* Volume 41, Number 4, December, pp. 981-1001.

Clarke, Mathew and Philip Lawn. (2007) "Comparing Australia's Genuine Progress to its Economic Growth Performance", *International Journal of Green Economics*, Volume 1, Numbers 3-4, pp. 513-531.

Dieter, Heribert. (2006) "The Limited Utility of Bilateral Free Trade Agreements", *Journal of Australian Political Economy*, Number 58, December, pp. 94-113.

Doran, Christopher. (2007) "A Militarised Neo-Liberalism: Australia's Economic Policies in Iraq", *Journal of Australian Political Economy,* Number 59, June, pp. 48-73.

EVSG & WVSA. (2006): *European and World Values Surveys Four-Wave Integrated Data File, 1981-2004,* Analysis Sociological, Economic and Political (ASEP), Madrid, Spain & Tilburg University, Tilburg, Netherlands.

Foster, R.A. and S.E. Stewart. (1991) (1991) *Australian Economic Statistics 1948-50 to 1989-90.* Canberra: RBA.

Gordon, David. (1978) "Up and Down the Roller Coaster", in Union for Radical Political Economics (Ed), *U.S. Capitalism in Crisis*. New York: URPE, pp. 22-35.

Gordon, David M. (1980) "Stages of Accumulation and Long Economic Cycles," in T. Hopkins and I. Wallerstein (eds), *Processes of the World-System*, London: Sage Publishers, pp. 9–45. Reprinted in Gordon, David M. (1998) *Economics and Social Justice: Essays on Power, Labor and Institutional Change,* edited by S. Bowles and T. Weisskopf, Cheltenham, UK and Northampton, MA: Edward Elgar.

Gordon, David; Richard Edwards and Michael Reich. (1982) *Segmented Work, Divided Workers: The Historical Transformation of Labor in the United States*. Cambridge: Cambridge University Press.

Higgins, Winton. (2006) "Globalisation and Neo-Liberal Rule", *Journal of Australian Political Economy*, Number 57, June, pp. 5-29.

King, John and Frank Stilwell. (2005) "The Industrial Relations 'Reforms': An Introduction", *Journal of Australian Political Economy*, Number 55, December, pp. 5-12.

Lawn, Philip and Mathew Clarke. (2006) *Measuring Genuine Progress: An Application of the Genuine Progress Indicator.* NY: Novas Science Publishers.

McDonough, Terrence; Michael Reich; David M. Kotz; and Maria-Alejandra Gonzalez-Perez. (2006) *Growth and Crisis: Social Structures of Accumulation: Theory and Analysis.* CISC: National University of Galway.

Mason, Dana. (2007) *The Rate of Profit and Accumulation in Australia, 1960-2006.* Honours Thesis. Global Political Economy Research Unit (GPERU), Curtin University, Perth, Australia.

Mavroudeas, Stavros and Demophanes Papadatas. (2008) "Financial Regulation and Deregulation", in Phillip Anthony O'Hara (Ed), *International Encyclopaedia of Public Policy—Governance in a Global Age: Volume 2. Economic Policy.* Perth, Australia: GPERU. *http://pohara.homestead.com/ encyclopedia/volume-2.pdf*

Mendes, Darian. (2003) "Australian Neo-Liberal Think Tanks and the Backlash Against the Welfare State", *Journal of Australian Political Economy*, Number 51, June, pp. 29-56.

O'Hara, Phillip Anthony. (2001) "Wealth Distribution and Global Inequality in the Multiple Capital Paradigm", *International Journal of Human Development*, Volume 1, Number 1, September, pp. 121-140.

O'Hara, Phillip Anthony. (2004) "The War on Terrorism, Political-Economic Contradictions and Policy Issues", in P.A. O'Hara (Ed.), *Global Political Economy and the Wealth of Nations: Performance, Institutions, Problems and Policies*. Oxford & NY: Routledge/Taylor & Francis, pp. 302-324.

O'Hara, Phillip Anthony. (2006a) *Growth and Development in the Global Political Economy: Social Structures of Accumulation and Modes of Regulation.* Oxford & NY: Routledge/Taylor & Francis.

O'Hara, Phillip Anthony. (2006b) "A Chinese Social Structure of Accumulation for Capitalist Long-Wave Upswing?", *Review of Radical Political Economics, Volume* 38, Number 3, Summer, pp. 397-404.

O'Hara, Phillip Anthony. (2007a) "Principles of Institutional-Evolutionary Political Economy—Converging Themes from the Schools of Heterodoxy", *Journal of Economic Issues*, Volume 41, Number 1, March, pp. 1-42.

O'Hara, Phillip Anthony. (2007b) "Heterodox Political Economy Specialization and Interconnection—Concepts of Contradiction, Heterogeneous Agents, Uneven Development", *Intervention Journal of Economics*, Volume 4, Number 1, pp. 99-120.

O'Hara, Phillip Anthony. (2007c) "Desarrollo desigual desigualdad global y sostenibilidad ecologica: tendencias y patrones recientes", *CLM Economia*, No 10, Primer Semestre, December, pp. 163-192. (In Spanish.)

Ostrom, Elinor and T.K. Ahn. (2003) (Eds) *Foundations of Social Capital.* Cheltenham, UK & Northampton, US: Edward Elgar.

PC. (Australian Productivity Commission) (2007) *Aggregate Productivity: Highlights—Longer-Term Trends.* Canberra: ACT.

Song, Lei Lei. (2002) *Public Capital, Congestion and Private Production in Australia.* Melbourne Institute Working Paper 23/02. 24pp. University of Melbourne: Melbourne Institute of Applied Economic and Social Research.

State Services Authority. (SSA) (2007) *A Matter of Trust.* Occasional Paper No 2. Melbourne: State Services Authority. Victorian Government.

UNCTAD. (United Nations Conference on Trade and Development) (2003) *Trade and Development Report, 2003: Capital Accumulation, Growth and Structural Change*. NY & Geneva: United Nations.

UNDP. (United Nations Development Program.) (2006): *Human Development Report 2006—Beyond Scarcity: Power, Poverty and the Global Water Crisis,* UN, New York.

World Bank. (2007) *World Development Indicators 1950s-2000s.* Washington DC: World Bank. Databank available by Subscription.