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Recession, Depression, and Financial Crisis: Everything Economists Want to Know But Are Afraid to Ask

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Abstract

Once again the economic experts are telling us that the current (October 2008) financial "crisis" will lead to a deep recession or depression. The financial press is even claiming that we are headed for "global meltdown". Heard it all before? The last time was in 1998 when we were told that the financial difficulties in the East would generate the "East Asian meltdown", which would last for at least a decade and would generate a "global economic crisis". The economic summit called by President Bush for later in 2008 is reminiscent of the G7 and G22 meetings called to discuss similar issues in 1998. And yet nothing happened. Of course the financial gurus, such as Alan Greenspan, were quick to claim the credit, but the truth is that financial crises are supply-side happenings that generate a lot of excitement among the stock market speculators but have little real-world fallout as long as the dynamic strategies being pursued by the world's leading societies are viable. The stock market crash of 1987 is another case in point: nothing serious happened in the real economy. Depressions only occur when dominant dynamic strategies are finally exhausted and new ones are slow to emerge: as happened in the USA during the 1920s and 1930s. The conventional wisdom among the orthodox economic fraternity that the Great Depression was the outcome of the 1929 Wall Street crash is totally incorrect. Economists and their political masters will only understand the relationship between recession, depression, and financial crisis, when they have developed a realist general dynamic theory of human society. Until then, economic policy will be confused, ineffective, and distorting. A general dynamic theory is presented in this paper and used to analyse financial crises and economic downturns. To the degree that the real global economy is in trouble, it is due not to financial mismanagement, but to the misconceived policy of inflation targeting pursued for the past decade or so. Once again, our compulsion to intervene exceeds our capacity to understand the implications of our actions

Keywords: financial crisis, depression, dynamic-strategy theory, inflation targeting, economic policy, global meltdown.

JEL codes: O40, O50, O43, E31, E32, E42, E50, E60

I Introduction

It is ten years since the (misnamed) "East-Asian meltdown", seventeen years since the last recession in Australia, twenty-one years since the last "crisis" on global stock exchanges, and just over seventy years since the Great Depression. So I suppose the general public and financial journalists can be excused for their undue excitement and confusion about the current financial difficulties and where it might lead. As far as they are concerned economic adversity in the past is just part of a dimly recognised folk law. It is more difficult, however, to find excuses for those who earn their living as market economists, public-service economists, and academic economists. Their opinions are supposed to be supported by extensive knowledge of relevant economic theory and detailed empirical studies of recessions, depressions, and financial crises. Yet under their urbane appearance, these economists are just as confused as everyone else about current financial and economic events, and where they might be leading us.

This confusion among economists – academic, public, market, and journalist – is reflected in the statements of politicians who take their advice. Most political leaders are all at sea in the current circumstances. Most political leaders have no idea what the panic on global stock markets, or what the difficulties experienced by financial institutions, actually means, or where it will lead. Their reactions range from the irrational – "it is all a result of corporate greed" (as if CEOs have a monopoly on this all-too-evident human characteristic) – to the ridiculous – "we need greater government intervention" – to the defeatist – "the world is headed towards a deep recession or depression". But all political leaders sense that these circumstances are an opportunity to be seen providing global leadership by holding back the forces of chaos and darkness. This is a bit like the story about the Anglo-Saxon king Canute (Cnut), who attempted to hold back the incoming tide and, according the twelfth-century chronicler Henry of Huntingdon, on failing, exclaimed: "Let all men know how empty and worthless is the power of kings" (or for that matter presidents and prime ministers!).

What is depressingly predictable about this type of eco-political soap-opera, is that it re-emerges every time there is a significant disturbance in financial markets. On each occasion – remember the stock-market "crisis" of 1987 and the "East-Asian meltdown" of 1998? – "experts" suggest that the global economy will turn down seriously and will probably end in depression, as is supposed to have happened after the 1929 crash on Wall Street. The lunatic fringe even talk excitedly about the return of Marx and the end of capitalism. And on each occasion the "experts" are proven wrong. Not that the capitalist economy is immune from serious economic downturn – as demonstrated by the Great Depression of the 1930s and the equally severe depression in Australia of the early1890s – just that it will arise not from the panic of stock-exchange gamblers or the incompetence of financial managers, but from the predictable exhaustion of strategic opportunities in the real dynamic economy. The source of this recurrent confusion can be found in what economists don't know about recession, depression, and financial crisis.

II What is it that economists don't know?

What is it that economists don't know? Quite a lot really. But at the root of it all, economists have failed to develop a realist general dynamic theory of human society. Without a realist dynamic theory it is impossible to make any real sense of the current circumstances in relation to recessions, depressions, and financial crises. And, further,

it is impossible to sort out the relationship between issues such as economic growth and inflation. Not surprisingly, policies designed to impact on these matters have become a matter of faith rather than science. In this section of the paper, therefore, a range of misconceptions will be briefly reviewed, before outlining a realist approach to societal dynamics that affords a more rational approach to economic policy.

On economic growth

Economic growth is not an escalator carrying consumers ever upward. While this truth will appear to be obvious to those with any understanding of history, it has been overlooked by many younger economists trained in the neoclassical tradition. The Australian economy, for example, has grown in a rapid and sustained fashion for the past seventeen years, which is a time frame longer than the working lives of many younger economists. As these practitioners have been schooled in neoclassical growth theory, which is concerned with a smooth upwardly directed equilibrium pathway, and as these days they are not taught any economic history, they have come to believe that modern economic growth (and they know no other) always proceeds positively and continuously. Hence, when faced with the prospect of even brief economic townturn or recession, they regard the situation as abnormal, even unprecedented.

As discussed in section III of the paper, modern economic growth takes place in a wave-like manner. This wave-like pattern, which can be demonstrated through a careful study of history (Snooks 1996: ch. 13), consists of waves within waves. There are the "great waves" of *about* 300 years duration (from trough to peak), which reflect the exploitation and exhaustion of entire dynamic strategies, such as those of conquest, commerce, or technological change. In turn, these great waves are constructed from a series of "long waves" of *about* 40 to 60 years, which are an expression of the exploitation and exhaustion of major substrategies, such as the pioneering British Industrial Revolution from 1780 to 1830 or the first long boom of the Australian economy from 1850 to 1890, both part of the larger technological strategy associated with the industrial paradigm. And these long waves are built upon a series of shorter waves of between 5 and 15 years, which are generated by more numerous, shorter, and more ephemeral strategic projects. It needs to be emphasised that these wave lengths are only approximations, owing to the random shocks sustained by the dynamic machinery that generates them. They certainly should not be employed for predictive purposes. What is important, however, is the general dynamic theory that can explain the emergence and progress of these strategic waves. This also is the subject of section III.

The point being made here is that modern economic growth occurs in a fluctuating manner. This cannot be avoided, and should not be regarded as abnormal. The role of policy is not to prevent regular ephemeral downturns, as these are the outcome of dynamic exhaustion resulting from a successfully exploited dynamic strategy/substrategy/strategic project. The role of policy is twofold: to minimise the impact of the ephemeral downturn on the most vulnerable groups in society; and to facilitate a rapid transition from an exhausted (or exhausting) to a new and vital dynamic strategy. In other words, the public budget should be spent on "strategic policy", rather than the traditional counter-cyclical policy.

Keynesian counter-cyclical policy, which has become amusingly fashionable again in the current financial "crisis", is merely ephemeral in its impact. While government expenditure will have a multiplied effect (over and above the initial expenditure), this effect is of limited duration and soon seeps away, requiring further

government expenditures. This cycle of multiplied expenditure and economic seepage, will continue until the budget is exhausted, unless a new dynamic strategy is embarked upon. The fatal flaw in Keynes' *General Theory of Employment, Interest and Money* (1936) is that it has no encompassing general dynamic theory (Snooks 1998b). Keynesian counter-cyclical policy is a bootstraps approach to recovery, and in the end it will fail, just as the Roosevelt "New Deal" failed to generate economic recovery in the USA during the 1930s. Had the Second World War not occurred, it seems highly likely that America would have plunged back into depression in the late 1930s and early 1940s. America's problem was that its earlier dynamic substrategy of supplying an expanding internal mega-market with industrial products had been exhausted by the mid-1920s, and until it was able to reorient itself from the internal to the world market – which was achieved through world war and the Marshall Plan – no amount of pump-priming would generate sustained recovery. Truman's Marshall Plan, unlike Roosevelt's New Deal, was a highly effective strategic policy.

On recessions, depressions, and financial crises

Recessions and depressions are not caused by panic on the floor of the stock exchange or by the greed and incompetence of finance managers. This truth is less obvious, but no less important, than that about economic growth, because its establishment requires more that systematic observation. It requires careful historical reconstruction and theory building.

The "evidence" referred to by orthodox economists when claiming that crises originating on the stock market and in the financial sector cause economic recessions and depressions is the 1929 Wall Street crash. This – to paraphrase William Cunningham's 1892 attack in the *Economic Journal* on Alfred Marshall's methodology – amounts to a "perversion of economic history". The conventional "wisdom" among orthodox economists is that the excessive speculation, panic by traders, and collapse of stock-market prices was the prime cause of the Great Depression in America. In fact, as I show in *The Ephemeral Civilization* (1997: 384–90, especially 387–88), causation ran in the reverse direction. The Great Depression was the outcome of the exhaustion, as early as the mid-twenties, of the American dynamic strategy of the previous half-century. This strategy involved basing their industrialisation process on an expanding internal mega-market, protected from cheaper European imports by an extensive system of tariffs. When the internal market ceased growing geographically – when the expanding western frontier was finally closed around 1890 – American strategists expanded their sales by introducing new techniques of mass production and distribution. But even this source of economic growth had been exhausted by the mid-1920s. The depression in America, therefore, was the outcome of the collapse of the long wave of economic growth that had gained its energy from an expanding domestic mega-market. The reason the depression was a protracted affair in America, was because of the difficulty of developing a new dynamic strategy, whereby the USA ultimately became the workshop of the world. As suggested above, this was finally achieved with the assistance of world war and the Marshall Plan.

In order to continue receiving high returns, capitalists increasingly shifted their funds from productive to speculative activities. In the process, speculation became the ocean rather than the bubble – to employ a Keynesian metaphor – and the stock market crashed once the majority of speculators finally realised that the situation was unsustainable. This only occurred *after* the real economy, which had

been declining since the mid twenties, turned down sharply at the end of the decade. Owing to the precarious structure of the international economy generated by the consequences of the Versailles peace treaty (in which the USA played a leading part) following the First World War, America's strategically determined depression spread rapidly around the world. If the USA were to exhaust its current dynamic substrategy soon, it would not have the same impact on the global economy that it did in the 1930s, owing to the latter's sounder real economic condition today.

Recessions and depressions, therefore, are outcomes of exhausting dynamic substrategies and strategic projects. They owe nothing to the activities of stock market or property speculators and wayward finance managers. Some economists have a vague supply-side model of the way a struggling financial sector impacts on the real economy via a "contagion" or "disease", which is supposed to spread from the institutional periphery to the real core of the economy. This can be seen in the way economists attempted to extrapolate the temporary financial difficulties in East Asia to the world in the late 1990s. Meetings of the G7 and G22 countries in 1998 were preoccupied with discussions about how to prevent the "East Asian meltdown" causing a global economic crisis. In effect, the agendas of these meetings were hijacked by those people who were involved in the East-Asian speculation. Here is what I said at the time in my book *The Global Crisis Makers* (2000: 2–4):

> **Some myths about the [1998] global "crisis"**
>
> **Myth** The global economy is on the verge of a crisis of its own making.
> **Reality** The apparent "crisis" to which the neoliberals refer is in reality just part of the normal dynamic process of strategic exploitation and exhaustion experienced by a number of nations in the global community…
>
> **Myth** The current global "crisis" is the outcome of financial problems in East Asia that have their origins in the corruption and cronyism of political leaders, financiers, and wealthy businessmen. It is a crisis that can only be resolved by financial, political, and moral reform.
> **Reality** Financial problems in East Asia are an outcome of the exhaustion or derailment of the dynamic strategies of the countries involved. They are, in other words, the result rather than the cause of real economic problems. Recovery in these countries will only occur when new dynamic strategies replace the old exhausted ones, or where derailed strategies are put back on track. Financial, political, and "moral" difficulties will resolve themselves as institutions respond to this strategic revitalisation rather than to neoliberal intervention.
>
> **Myth** The present global "crisis" is an Asian crisis. It is the outcome of the "East Asian meltdown".
> **Reality** There is no "East Asian meltdown, just as earlier there was no "East Asian miracle". The mythical sequence of "miracle" and "meltdown" is merely the normal process by which dynamic strategies are exploited until they are finally exhausted. After a hiatus – popularly known as a recession/depression – a new strategy will emerge. Each of these aspects of the dynamic process is a new wonder only to an intellectual discipline that has no general dynamic theory.

Myth World leaders and their economic advisors are deeply concerned about the global crisis.

Reality Recent (1998) meetings of the G7 and G22 countries to discuss the global "crisis" were hijacked by representatives of the "global gamblers" and their backers, the "global casino financiers". The global gamblers are those individuals and groups that are speculating in the currencies and paper assets of East Asia. Through their neoliberal supporters they have succeeded in persuading world leaders that a *real* global recession/depression is about to occur. It is not surprising to discover that President Clinton's main economic advisors are former money-market participants (Alan Greenspan and Robert Rubin) and his favourite economic authors are successful market speculators (George Soros). What is the motivation of the global gamblers? Narrow self interest. If the speculative boom bursts the global gamblers will be ruined…

Myth There will be a spillover from the east Asian "meltdown" to the rest of the world, probably extending into the new millennium.

Reality As the downturn in East Asia is, it will be shown, a normal outcome of the pursuit of a successful dynamic strategy, there will be no spillover into the rest of the world…

As we know with hindsight, East Asia did not slip into a long and deep depression, but recovered quickly and strongly as, on the basis of the dynamic-strategy theory, I claimed it would; there was no spillover to the global economy and there was no global crisis as I predicted, in the face of orthodox opinion; and the financial "crisis" did not bring down international financial institutions. While there was never going to be a global economic crisis, this did not stop the market economists claiming credit where none was due. As I said at the time (Snooks 2000: 27–8):

> Probably the most remarkable example of neoliberal hagiography is a front page article in *The Times* (15 February 1999) on Alan Greenspan (chairman of the US Federal Reserve), Robert Rubin (secretary of the US Treasury), and Larry Summers (deputy secretary of the US Treasury), entitled "The Committee to Save the World". This article paints a glowing picture of three white knights who, through their financial interventions (a central neoliberal inconsistency) at the national and global levels, have been successful in "saving the world " from collapse. We are told with bated breath that these three men from the worlds of finance and academia, who have "outgrown ideology" despite their "faith in markets" (another inconsistency), are not only "inventing a 21st century financial system" but are single-handedly responsible for "fighting off one collapse after another" and preventing "a near thing becoming a disaster". This has been due to their "intellectual honesty" and their success in "defending their economic policy from political meddling". This is no less than the "great (neoliberal) man" view of history.

Only a decade later, with the emergence of another panic among the global gamblers, has this evaluation been revised. Now Greenspan is being blamed for not inventing a 21st century financial system that could forever abolish financial crisis. Even the ex-Federal Reserve chief has admitted to Congress (in October 2008) that: "I made a mistake in presuming that self-interest of organizations, specifically banks and others,

was such that they were best capable of protecting their own shareholders and equity… I was partially wrong … in the regulation of derivatives… we were wrong quite a good deal of the time". But, of course, at the time, Greenspan helped to shore up the global casino. Today it is the turn of a new generation of market economists and neoliberal academics in the US treasury and Federal Reserve to pretend they understand the dynamics of the global economy. Their impact will be no different.

In the face of this orthodox confusion, it needs to be emphasised that the real economy is driven by demand-side forces rather than supply-side institutions. In sophisticated societies, any supply-side restriction is quickly resolved through innovation. Accordingly, if the economic problem confronting us is the outcome of strategic exhaustion (a demand-side phenomenon), then neither the monetary (supply-side) nor pump-priming (Keynesian expenditures) measures currently being pursued will help at all. Just as they failed to help during the Great Depression. What is required are strategic policies aimed at facilitating the emergence of a new dynamic substrategy. If, however, the problem facing the world today is merely a financial one, brought about by excessive greed and incompetence in that sector, then the real economy will hardly miss a beat. Only the excessively greedy, foolish, and imprudent will feel the heat. Undiminished strategic opportunities in the real economy will always call forth the necessary investment to sustain positive economic growth. Funds will always be provided where long-term profitable opportunities exist, particularly in circumstances where speculation is on the nose. In terms of the dynamic-strategy theory discussed below, financial institutions will sort themselves out sufficiently to respond to the encouragement of strategic demand. In the Dynamic Society – as I have shown in a long series of books – demand creates its own supply. Say's Law, which states the opposite, is a fiction of classical and neo-classical economic theory.

On societal confidence

The societal confidence that matters is not confidence among speculators on the stock exchange – the global casino – or even confidence among players in the financial sector, but confidence of the entire community in the strategic pursuit. This fundamental form of confidence – "strategic confidence" – is generated by the successful unfolding of a society's dynamic strategy and the material prosperity it brings. As will be shown theoretically in section III, strategic confidence is the force that binds society together, whereas its absence causes society to fly apart.

A successful dynamic strategy spins an effective network of competitive/cooperative relationships, together with all the rules and organizations required to facilitate the strategic pursuit. In societal transactions, individuals relate directly to the successful strategy (via its material outcomes), and only indirectly to each other. By this I mean that trust is a product of confidence in the wider dynamic strategy in which all society's members are involved, rather than confidence in other individuals or institutions. Trust, in other words, is derived from strategic confidence. Once a previously dominant dynamic strategy has been exhausted and cannot be immediately replaced, strategic confidence declines and, in extreme cases, evaporates completely. And as strategic confidence declines, so too does trust and cooperation. Strategic confidence is communicated directly to individuals in human society by the rise and fall of material standards of living.

Accordingly, fundamental confidence in financial institutions is a derived function of strategic confidence. Even the greed and incompetence of finance managers will have only a superficial and ephemeral impact on confidence in this

sector if the strategic situation of society is sound. Certainly, these forces will have no impact on strategic confidence. Hence, if the strategic pursuit is viable, any independent financial misfortunes, such as those at the end of 2008, will be superficial and ephemeral. The policy conclusion, therefore, is that it is unnecessary, indeed a waste of time and public money, to attempt to bolster confidence in the financial sector by making grand statements about unlimited government guarantees concerning bank deposits, and/or distributing large sums of taxpayers' money to failed financial institutions. In any case, central banks already possess the power of lender in the last resort, which is enough to protect depositors' funds without distorting markets. Also, investing public funds in failing institutions merely serves to distribute taxpayers' money to those who created the problem in the first place. It is fairer and less distorting to directly assist those borrowers/lenders who have suffered, through no fault of their own, at the hands of the unscrupulous.

On the role of inflation

Inflation is widely viewed as a pernicious influence in the economy, at least until the spectre of deflation raises its head. The truth is that there are two broad types of inflation: "good" or strategic inflation; and "bad" or nonstrategic inflation. As shown in section III, strategic inflation is the interface between a changing strategic demand and the supply response. Strategic inflation, which provides the necessary signals and pressures to elicit the appropriate supply response to changes in strategic demand, is the inevitable outcome of a successfully unfolding dynamic strategy. It reflects the challenges that the unfolding dynamic strategy poses for the host society. Suppressing strategic inflation through the misconceived policy of inflation targeting distorts the strategic demand-response mechanism and applies the brakes to the strategic pursuit. If inflation targeting were pursued thoroughly and relentlessly, economic growth would grind to a standstill. Further, this policy is totally unnecessary as no viable strategic economy has ever experienced runaway or hyper inflation. Hyperinflation is the outcome of a failed strategic society, such as the Weimar Republic in the 1920s (owing to massive war reparations) and Zimbabwe today (owing to political mismanagement). This is borne out by the growth-inflation curve that I developed in the mid 1990s (Snooks 1994: 256–69; 1997; 1998: ch. 11).

The Western World has been pursuing the policy of inflation targeting for the past decade or so, despite the absence of a dynamic theory that can justify it. Although there are political difficulties preventing this pursuit being both thorough and relentless – the inflation target has gradually risen from zero to around 3 or 4% pa without any change in the underlying theoretical argument – Western governments have been determined to constrain inflation. For the past decade I have suggested that this will cause economic problems in the longer term (Snooks 1998; 2008b; 2008c). That time has now arrived. Any problems in the real economy today that transcend the financial crisis are due to inflation-targeting policy. If we wish to renew our pursuit of growth and prosperity, it will be essential to abandon this misconceived, theory-free policy. Yet we do need to keep a watchful eye on nonstrategic or bad inflation. This is the inflation that arises from exogenous shocks (such as a sudden increase in oil prices) and from inappropriate monetary (excessive reductions in interest rates or excessive increases in funds for lending) and fiscal (unnecessary pump-priming) policies.

Curiously, the existing orthodox position is to suppress good (strategic) inflation and to promote bad (nonstrategic) inflation. As explained above, good

inflation has been suppressed through the policy of inflation targeting, which in turn has contributed to the current economic problems faced by the Western World, particularly in the USA. In the midst of these self-engineered economic problems, Western governments are eagerly taking up the task of providing large fiscal stimuli – or pump priming – in the face of groundless fears that a deep recession or depression (which they believe will be induced by the current financial difficulties) is just around the corner. This is being done at a time when inflation is higher – in Australia it has reached an annual rate of 5% (October 2008) – than it has been for a decade or so. If these inconsistent plans are acted out, there will be an increase in bad inflation, which will, of course, lead to another change of policy direction by reinstating inflation targeting, which once again will suppress good inflation and, hence, economic growth. The end result of this complete confusion on the part of economists – and, hence, of political leaders – about the dynamics of human society could be a lurching from fears of inflation to fears of deflation and back again in a totally destabilising manner. Clearly we need to abandon the compulsion to intervene in a complex dynamic process about which orthodox economics can provide no understanding.

On "regulating capitalism"

The combination of fear of the future, compulsion to intervene in matters we don't understand, and misplaced hubris in our ability to do so is generating a dangerous situation. Many social scientists, including those with training in orthodox economics, believe that modern capitalism is running out of control. These are the "naive institutionalists". They also believe their knowledge of human institutions gives them special insights into reshaping modern capitalism, despite having no understanding of the dynamics of human society. This can be done, they claim, by establishing a range of behavioural rules, which will redirect decision makers throughout capitalism. It has not occurred to them that human civilisation has managed without reforming institutionalists for the past 11,000 years, with even modern society flourishing unaided for the past couple of centuries. The truth is that the only danger human society faces is from interventionists determined to bend it to their will. The dangerous impact of determined and powerful "experts" can be seen in the case of the USSR, a tightly regulated system that collapsed after merely seventy years under the influence of the "metaphysical (non-empirical) interventionists".

But interventionists, uninformed about the dynamics of human society, fail not only in the big things but even in the little things, such as the various attempts in the last quarter of 2008 to "fix" the so-called "global financial crisis". Governments around the world, who are advised by doctrinaire "experts", attempted to rescue their financial institutions by injections of large quantities of tax-payers' money, and by giving grandiose guarantees of unlimited protection to bank deposits. The latter "solution" was chosen by the Australian Rudd government, on the advice of both the Governor of the Reserve Bank of Australia and the Secretary to the Australian Treasury, despite the fact that the Australian banking system, in contrast to its US counterpart, was regarded as very stable at the time. The immediate and very predictable response by the public was a major run on the deposits – amounting to tens of billions of dollars – held by financial institutions not covered by this guarantee. The response of the financial institutions concerned was to freeze their deposits. This involves a major distortion of the financial market and it imposes a major burden on a sizable part of society that depends on access to personal superannuation funds. Hence, because the Australian government and its official and

unofficial economic advisors had (and have) no understanding of the dynamics of their economy, instability was injected into an otherwise secure and stable system.

Similarly, the large-scale injection of taxpayers' funds into failing financial institutions around the world will seriously distort the dynamic mechanisms of these countries. It will also lead to the partial nationalisation of financial institutions, which is unlikely to increase either their efficiency or ethics. And it will unfairly distribute taxpayers' funds to greedy and incompetent finance managers. It would have been better from this standpoint to allow the business of failing institutions to be taken up by more progressive corporations, as normally occurs, and to directly assist innocent consumers. There is a great deal of political grandstanding underlying these actions, which have been undertaken by ambitious but uninformed individuals attempting to project their image on to the world stage.

III The ABC of realist dynamics for economists

The realist dynamic theory underlying the above discussion is briefly presented in this section. To understand the patterns of societal dynamics – including recessions, depressions, and financial crises – we require a new dynamic theory. The old theories, unlike the dynamic patterns, tell a story of selective comparative statics. The dynamic-strategy theory, which has been developed in a long series of books (see References), is outlined by focusing on its central features: the driving force; the dynamic mechanism; strategic demand and strategic confidence; the strategic demand-response mechanism; and strategic leadership in the theoretical Dynamic Society.

The driving force

The endogenous driving force in the Dynamic Society is the competitive struggle of 'materialist man' to survive and prosper. This is the major outcome of our biologically determined desires – what I call 'strategic desire' – that have been shaped by genetic change over almost 4,000 million years (myrs). In the dynamic-strategy model, as in life, ideas are an effective way of achieving our desires, but they do so in a passive way. In the longrun, as we will see, ideas respond to 'strategic demand'. Two major implications emerge from this reality: altruism is not a prime determinant of human behaviour; and the decision-making process is not dominated by neoclassical rationality. The origin, evolution, and nature of strategic desire and human nature have been explored in considerable depth in my recent book *The Selfcreating Mind* (2006a).

If ideas do not drive society, but merely facilitate the desires of its members, we need to replace the neoclassical rationality model of decision-making with a realist model. Through the inductive method it is possible to derive such a model, which I have called the 'strategic-imitation model' (Snooks 1996: 212–13; 1997: 36–46). In reality, decision-making is based on the need to economise on nature's scarcest resource – intelligence. Rather than collect vast quantities of information on a large range of alternatives for processing through a mental model of the way the world works, the great majority of decision-makers – whom I call the 'strategic followers' – merely imitate those innovative people ('strategic pioneers') and projects that are conspicuously successful. The only information they require is that necessary to answer the key questions: Who and what is materially successful and why? Hence, the basic information required by decision-makers is the relatively inexpensive 'imitative

information', not the prohibitively expensive benefit-cost information. Even the leading decision-makers – the strategic pioneers – do not employ rationalist techniques when seeking new ways of exploiting strategic opportunities. Rather than exhaustively seeking out the best investment projects, they *believe* their investment projects are best. It is the market that adjudicates.

The dynamic mechanism

The endogenous driving force of strategic desire is a self-starting and self-sustaining force that drives a dynamic mechanism, which has at its centre the 'strategic pursuit' – the pursuit of a dominant dynamic strategy. It is through the strategic pursuit that the objective of survival and prosperity is achieved. This dynamic strategy begins as an individual or family activity which, if successful, is adopted by wider social groups, at first local, then regional, and, finally, national. This takes place through the mechanism of strategic imitation, whereby successful pioneering initiatives are imitated by a growing number of individuals and groups. In this way, a successful dynamic strategy becomes the focus of political policies controlled by ruling strategists, or 'strategic leaders'. The role of 'strategic leadership' is discussed below.

The choice of dynamic strategy – from the four possibilities of family-multiplication (procreation *and* migration), conquest, commerce, and technological change – depends on the underlying economic conditions, such as factor endowments and the nature of external competition. It is a choice made by strategists who invest time and resources in alternative dynamic strategies. The important point to realise is that investment in these various strategies is undertaken for the same objective – survival and prosperity – and involves a broadly similar process, which is the strategic pursuit. The main difference is that investment in family-multiplication, conquest, and commerce is undertaken in order to achieve economic growth by gaining control of new *external* resources, while technological change is used to achieve economic growth by effecting greater efficiency in the use of existing *internal* resources. As far as the strategist is concerned – in contrast to the orthodox economist – there is nothing special about technological change. After all, Roman economic growth over a period of 1,000 years was generated knowingly through the systematic pursuit of conquest, not technological change. Technological change, like the other three dynamic strategies, is just an instrument in the more general strategic pursuit. Similarly, within the context of a particular dynamic strategy, strategists attempt to gain a competitive advantage through the adoption of new substrategies that, where successful, generate new 'technological styles'.

As individuals and governments seek to exploit their physical and societal environments, setting in train a mass movement orchestrated through strategic imitation, the dominant dynamic strategy unfolds. Unfolds in the sense that its material opportunities are progressively exploited and, finally, exhausted. And it is this unfolding dynamic strategy (or substrategy) that shapes the expectations of decision-makers. The eventual exhaustion of a dynamic strategy is the outcome of the 'law of diminishing *strategic* returns', whereby the revenue and costs of *strategies* rather than factors of production are finally equated (Snooks 1998a: 202–03). The resulting 'rise and fall' of dynamic strategies and substrategies traces out a distinctive wave-like pathway, which provides the dynamic form for this model. This supersedes the arbitrary dynamic forms – the equilibrium growth path and the bifurcated pathways – adopted by supply-side neoclassical, evolutionary, and complexity growth

theorists. A meaningful dynamic form cannot be deduced logically from supply-side assumptions about society. It is an existential concept, not an optimising concept.

From historical observation, however, we can derive a general dynamic form that encompasses a series of wave-like surges in economic development and growth that are separated by intervals of stability or retreat. This sequence consists of 'great waves' of about 300 years in duration and, within these, 'long waves' of about 30–60 years. The great waves are generated by the exploitation and exhaustion of dynamic strategies (for example, the present industrial technological strategy) and the long waves by a series of substrategies (for example, the pioneering phase of the Industrial Revolution in Britain, 1780–1830). We should focus, however, on the underlying dynamic mechanism rather than the precise wave-like pattern, because exogenous shocks continually distort the latter. These wave-like surges should not be thought of as part of a dynamic 'cycle', because the intervals between them are not systematically related to the surges of development before and after. Each of these intervals constitutes a hiatus that follows the exhaustion of a dynamic strategy (or substrategy) during which the strategists search desperately for a replacement strategy (or substrategy). The best recent example of such a strategic hiatus is Japan during the 1990s and early 2000s. If the strategists are successful, the strategic sequence will continue but, if not, the sequence will terminate and the society will eventually collapse. The latter ultimately occurred in all ancient societies.

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Strategic demand and strategic confidence

The unfolding dynamic strategy, driven by the competitive energy of strategic desire ('materialist man'), plays a central role in the dynamic-strategy model. Not only does it provide the model with a realistic dynamic form, but it gives rise to two new concepts in economics – 'strategic confidence' and 'strategic demand'. These concepts explain not only the dynamics of long-run investment and saving that are left hanging in orthodox comparative-static macroeconomics, but also how 'dynamic order' (usually called spontaneous order) is generated. It is the exploration of the demand side of dynamics that makes the dynamic-strategy theory unique in a world of supply-side theories, not only in economics and the other social sciences, but also in biology and physics (Snooks 2008a).

Strategic confidence, which rises and falls with the dominant dynamic strategy and its various substrategies, explains the changing investment climate in the Dynamic Society. It provides, for example, a dynamic explanation for Keynes' 'state of long-term expectation'. Accordingly it plays a central role in determining the willingness of strategists to invest, because of its influence on the longrun expected rate of return, and in the creation of dynamic order (through encouraging cooperation and an orderly institutional structure). Confidence and expectations rise as the dynamic strategy unfolds, and they decline, stagnate, and may even collapse as it is progressively exhausted. Strategic confidence also binds society together.

Strategic demand – or dynamic demand – also waxes and wanes with the dominant dynamic strategy or substrategy. It comprises the effective demand exercised by decision-makers for a wide range of physical, intellectual, and institutional inputs required in the strategic pursuit. In exploiting expanding strategic opportunities, entrepreneurs need to invest in new infrastructure; to purchase intermediate goods and services; to employ labour skills; to acquire, renovate, or construct the necessary buildings, machinery, and equipment; to engage professional

expertise; and to develop new facilitating social rules and organizations. Strategic demand, therefore, is the central active principle in our demand-side model. Naturally the supply responses – of population change, capital formation, technological change, and institutional transformation – which are influenced by changes in relative prices, will contribute to the way in which strategic opportunities are exploited; but they do so passively. This concept turns Say's Law – which was accepted explicitly by the classical economists and implicitly by neoclassical economists – on its head: in the Dynamic Society, dynamic demand creates its own supply.

The strategic demand-supply response

With the dynamic-strategy model we can shift focus from comparative-static macroeconomics to longrun dynamics by considering the interaction between strategic demand and the response of the supply-side variables. It is this interaction that causes the dynamic strategy to unfold and, hence, gives rise to the dynamic form of our model, and to the dynamic role played by *strategic* inflation in facilitating the supply response. 'Strategic inflation' is the widespread increase in prices resulting from the pressure of strategic demand on resources, commodities, and ideas. With the introduction of a new dynamic strategy/substrategy, the resulting expansion of strategic demand will lead to an increase in prices of key inputs, but will not generate strategic inflation until the new strategy exerts widespread influence throughout a given society. Economic growth of a traditional and unadventurous (that is, nonstrategic) kind that occurs within the context of known and available resources (such as in Australia during the past decade), may not lead to much inflation at all. But this nonstrategic growth will not last for long. 'Nonstrategic inflation', on the other hand, is the increase of prices resulting from errors in monetary policy and the action of monopolies in either factor or commodity markets at home and abroad.

Herein lie the major differences between strategic theory and orthodox theory. In neoclassical economics the supply side is, by default, treated as the active force in society (supply creates its own demand), which has no place for strategic inflation; while in Keynesian economics the supply-side variables are merely assumed to be given, and 'effective demand' is a comparative-static, national-accounting concept. By contrast, in the dynamic-strategy model, strategic demand provides the active force to which the supply-side variables respond according to their supply costs. Strategic inflation, which provides the incentive system in this strategic demand-response mechanism, is a stable, non-accelerating function of economic growth. This theoretical relationship can be (and has been) estimated in the form of the 'growth-inflation curve' over all timeframes – including the very long-run (past 1,000 years), the long-run (past 100 years), and short-run (1960s–1990s). These growth-inflation curves are estimated and discussed in Snooks (1998b: 151–59). Inflation targeting, where this constrains strategic inflation (as it invariably does), acts as a brake on the unfolding dynamic strategy. To eliminate strategic inflation in the longrun is to eliminate economic growth.

Population, labour supply, capital formation, and technological and institutional ideas all respond to the unfolding dynamic strategy. Changes in these supply-side variables, both in terms of composition and growth rates, are a function of changing strategic opportunities. These variables expand and become more complex as the dominant dynamic strategy is exploited; and they stagnate, decline, and lose purpose as the dynamic strategy is progressively exhausted and marginal *strategic* returns decline. Rapidly rising and falling prices form the catalyst for these dynamic

developments. Naturally, supply-side costs play a role in shaping the strategic response, but this is a passive rather than an active role. Difficulties of supply are met by substitution of other resources and/or by innovation. In this way the supply-side variables are treated endogenously in the dynamic-strategy model. Dynamic demand creates its own supply.

The role of strategic leadership

Strategic leadership, which is also a response to strategic demand, is essential to the survival and prosperity of human society. It was the primary reason for the emergence of government at the dawn of civilization and for its extension and maintenance ever since. Basically it involves facilitating the objectives of society's dynamic strategists by coordinating their efforts, directly through government directives and incentives, and indirectly through cultural institutions such as religion, ideology, and the arts. In particular the strategic state provides basic infrastructure required by the unfolding dynamic strategy that is beyond the risk threshold and financial resources of individuals and corporations; it negotiates political and commercial deals with other societies; it protects the dynamic strategy at home and abroad; it encourages the emergence of new strategies during recessions/depressions; and it provides basic facilities for education, training, and research required to nourish the long-term health of the prevailing dynamic strategy, whether it be conquest, commerce, or technological change. This is a proactive rather than a passive role, and it is undertaken by the representatives of the strategists for the benefit of the strategists (Snooks 1997: 54–8; 2000: 57–111). But at the same time, it is not a response to the fantasies of the "metaphysical interventionists", which will merely subvert the strategic pursuit and lead to serious economic problems or even societal collapse (as in the USSR).

It is important to realise that the strategists do not necessarily encompass the entire population of a society. They include only those individuals who invest in the dominant dynamic strategy, either in physical or human-capital terms. The proportion of the population that can be classified as being among the strategists has varied throughout human history, not in a linear but in a circular way (Snooks 1997: ch. 3). In Palaeolithic (hunter-gatherer) society, almost 100 percent of adult members were actively involved in the family-multiplication strategy (for example, Aboriginal Australia). Hence, family and tribal leaders had to take into consideration the aspirations of all adults. By contrast, in Neolithic (agricultural) societies, only a small proportion of the population was actively engaged in the strategic pursuit, while the great majority were nonstrategists, being deprived of their liberty by the ruling elite. The proportion of strategists in the population ranged from less than 1 percent in conquest societies (for example, Anglo-Norman England) to about one-quarter in commerce societies (ancient Greece or medieval Venice). Only in advanced technological societies has the strategist/population ratio once more approached that of hunter/gatherer societies. This was an important social benefit that the original Australians had over the British invaders in 1788.

A realist dynamic form

The supply-side approach of orthodox economics has had a characteristic impact on the dynamic form and the explanation of its growth models. The contribution that a demand-side approach might make to both has not even been considered. The

argument here is that the dynamic form of a realist growth model is the outcome of the real-world interaction between strategic demand and the supply response. This section provides a brief outline of a realist dynamic form.

In neoclassical growth models, the steady state (a concept adopted from classical thermodynamics), or equilibrium growth path, is an attempt to provide not only a structure for the growth process but also an objective for a growing society. It is a dynamic centre of gravity towards which an economy is supposed to automatically converge. The equilibrium pathway for the Solow-Swan model, for example, is determined by the nature of the neoclassical production function. These models assume that the growth path is smooth and that the growth rate, which is determined exogenously, is constant over time. This picture can be varied, but only by making a number of arbitrary assumptions. John Hicks (1965) as well as Luigi Pasinetti and Robert Solow (1994: 359, 376), for example, make the point that for each state of technology there will be a different equilibrium growth path, and that a society will move, or "traverse", to a new pathway with each discrete change in technology. Apart from making the point that convergence is likely to involve a series of pathways rather than a single pathway, little is added to the Solow-Swan model. Any attempt to map these changes in pathways and growth rates would be pointless in the absence of real-world information, because Hicks and others do not provide models to suggest how these "traverses" would take place. It is the substance of the dynamic form, not its appearance, that we are chiefly interested in. And, as suggested earlier, the substance of neoclassical growth models is entirely artificial. As I argued in *Longrun Dynamics* (1998b), the new wave in growth theory of the mid 1990s, despite the enthusiasm of its participants, would dash itself on the barren rocks of deductivism. And it did.

A realistic dynamic form can only be derived by observing the way societies grow over the long run. This, of course, is only one aspect of the larger objective of inductively deriving a realist dynamic theory from historical analysis – from a remembrance of things past. We need to explain the underlying dynamic process as well as the dynamic pathway. To do so we need to draw the distinction between a "time path" on the one hand and a "dynamic pathway" on the other. A time path is merely the statistical profile of an unexplained variable over time, whereas a dynamic pathway – what I call the "strategic pathway" – is the embodiment of an explained dynamic process. The basic theory is outlined above, and a brief sense of the strategic pathway is provided here.

A dominant dynamic strategy unfolds not in response to teleological forces but to the actions of individuals attempting to survive and prosper in a competitive world. In order to exploit strategic opportunities, individuals and their governments invest in the necessary infrastructure, plant and machinery, techniques, institutions, and organizations. And as the dynamic strategy unfolds, the living standards – the measure of strategic success – of the participants rise. This unfolding process continues until the strategic opportunities have been exhausted – the outcome of the law of diminishing *strategic* returns (Snooks 1998a: 202–03) – at the stage when marginal strategic returns and costs have been equated. It is important to realise that dynamic diminishing returns operate not on resources but on strategies. Also this dynamic law encompasses the static classical law of diminishing returns based on the misleading assumption of a fixed supply of land (or natural resources) in the long run; and it resolves the difficulty inherent in the neoclassical version of diminishing returns, which views all resources as being in fixed supply in the short run (Snooks 1998b: 131–32).

The generalised strategic pathway consists of a series of economic waves carrying society to higher levels of complexity and prosperity. It can represent the very long run (up to 1,000 years), the long run (say 200 years), and the short run (from a half-century to a decade). There are significant differences between this realist strategic pathway and the steady state (Figure 1b). The most obvious of these is the wave-like pattern of the strategic pathway in contrast to the smooth equilibrium path of the neoclassical model. This difference leads the neoclassically trained economist to think in terms of continuous and steady economic growth, while the economic stratologist thinks of growth at all levels as occurring in a fluctuating manner. As discussed above, in the very long run these waves are of *about* 300 years in duration, in the long run they are *about* 40 to 60 years, and in the short run they are *about* 5 to 15 years, and are the outcomes of the systematic exploitation and exhaustion of dynamic strategies, substrategies and strategic projects. The reason I refer to these somewhat regular fluctuations as "waves" rather than "cycles" is that each surge of economic activity is associated with a discrete strategy, that is worked out over a period of time. A further economic surge requires the adoption and exploitation of a new dynamic strategy. There is nothing automatic about this strategic renewal, which is why the interval between waves at the long-run and very long-run levels is a time of considerable concern. Examples include the USA between the mid-1920s and the mid-1940s and, more recently, Japan from the 1980s to the 2000s. These intervals should be thought of as "interregnums" rather than "troughs" (which implies an automatic cyclical momentum), as there is no guarantee that a new dynamic strategy will emerge before the beleaguered society begins to descend into chaos. This highlights the importance of pursuing strategic policy rather than counter-cyclical (or Keynesian) policy.

Speculation and financial "crisis"

Speculation is an outcome of the gambling instinct in mankind. The urge to make a quick dollar is overwhelming. This can be seen on the stock exchange as well as the race track. While the stock exchange provides an important function in the strategic pursuit by mobilising investment funds in both the national and international communities, the urge to speculate has turned the stock market into a casino. When an economy is pursuing a successful dynamic strategy, speculation attracts only a modest amount of attention. Some people, who are susceptible to an irresistible urge to become wealthy at any cost, are not particular about how riches are generated provided (presumably) the activity is legal. The proceeds from gambling on the stock exchange are just as good as those from more productive strategic activities – or so they convince themselves. The determining factor is the rate of return on their funds. Hence, while the real economy is booming, and the strategic rates of return are high, the majority of investors will place their funds in productive strategic activities, owing to the lower degree of risk. But as the dynamic strategy or substrategy increasingly approaches exhaustion, a growing number of investors will transfer their funds from productive to speculative activities in an attempt to maintain the high rates of return on their capital. By the time the dominant strategy/substrategy has been completely exhausted, the majority of "investors" will have become speculators.

From this point, the "economic casino" gains a momentum of its own, and prices of stocks and shares are driven up to unsustainable levels in a fever of speculative excitement. This can rapidly spread from the economic casino at the national level to that at the global level. These excesses may also infect financial

institutions, which shift their lending activities from sound productive activities to unsound and unproductive activities (such as sub-prime lending in the USA). Clearly this can only continue for a limited time. Once a sufficient number of speculators involved in this process finally realise that prices cannot continue to go up forever, and begin selling paper assets in sizable quantities, the game is up. Gamblers in the casino begin panic selling and the prices of stocks and shares fall as rapidly as they rose. This is what happened on Wall Street in 1929, in the global casino in1987, and is happening again today (2008). The real economy is rarely badly affected by fallout from a casino crash. In fact, it actually frees up funds for productive investment in the newly emerging dynamic strategy/substrategy. It is essential to recognise that the stock exchange is not the economy – a widespread misconception – and the financial sector is only a strategic instrument in the strategic pursuit. This is often forgotten because, while the stock exchange and the financial sector have a concrete physical presence, the dynamic mechanism is invisible to all but a few.

IV Conclusion

Many economists in late 2008 are talking about the prospects of a forthcoming global recession or even depression; financial journalists with their usual purple prose are writing about a "global meltdown"; and national politicians are making grand, if empty, gestures to hold back the incoming tide. We have heard it all before and we will hear it all again, at least until a serious attempt is made to understand the dynamics of human society. When this occurs economists will all be able to distinguish between recessions, depressions, and financial crises, and understand what causes them. They will also discover exactly what it is they have always wanted to know but were too afraid to ask.

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