



The Age Of Turbulence: Adventures In A New World

By Alan Greenspan
A Review by Kester Guy*

Introduction

This review delineates some key aspects of the book, **The Age of Turbulence Adventures in a New World**, in which Alan Greenspan traced the development of the “new world.” Specifically, he articulated some of his experiences and proposed a conceptual framework for understanding the new global economy. In doing so, he explored some critical elements of this emerging global environment: the principles that govern it; the vast energy infrastructure that powers it; the global financial imbalances and drastic shifts in world demographics that threaten it; and the chronic concern over justice and the distribution of its rewards. Greenspan conveyed his perceptions through the context of his own experiences and with a sense of responsibility to the historical record, so that readers could better appreciate his views.

The review continues with an outline of Greenspan’s autobiography. An overview of some turbulent experience in the United States is then presented and some of the developments in the new global economy are summarised.

Greenspan’s Biography

The early chapters of this book highlighted some phases of the author’s life, which helped shape the views he presented. Alan Greenspan was born in 1926 and was brought up by his mother in a lower middle class neighbourhood in Manhattan. As a boy, Greenspan visited his father monthly, but according to him, those visits were not sufficient to mend the “gaping hole” in his life. At age nine, his father wrote and dedicated the book, “Recovery Ahead” to him. This was during the Great Depression and the book predicted that the glory of the US economy would be restored.

Perhaps this was a defining moment for Greenspan as the book was inscribed: “To my son Alan: May this my initial effort with constant thought of you branch out into an endless chain of similar efforts so that at your maturity

you may look back and endeavour to interpret the reasoning behind these logical forecasts and begin a like work of your own. Your dad.”

As a youngster, Greenspan was an avid baseball fan and player. He was also skilled at Morse code and photography. However, none of these hobbies could compare to his fervent passion for music. At age twelve he started playing the clarinet and practised with total dedication daily. Soon after he learned several other instruments and was playing with a band at various shows. Upon graduation, Greenspan’s heart was set on joining the US army where he had hoped to be a part of the band. However, his dream was shattered when he was declared medically unfit to serve. Despite this, he continued with his music career, touring various parts of the US. Greenspan eventually enrolled in the School of Commerce, Accounts and Finance at New York University in 1945 and upon graduation he accepted a scholarship to pursue a master’s degree. By 1952, Greenspan was pursuing his Ph.D. in economics while he worked at the National Industrial Conference Board. Later that year he got married, however, within two years his life swivelled: he separated from his wife, dropped out from graduate school and quit his job to start a consultancy business.¹

Greenspan continued in technical research and had several articles published in various journals. His business also expanded and his name became well known among businessmen, policymakers and other economic technocrats. Greenspan’s involvement in public life started in 1967 when he was invited to serve as a policy advisor in the Richard Nixon campaign for president. While in public life Greenspan functioned in various capacities including: Economic and Domestic Policy Advisor, chairman of the Council of Economic Advisors², and Federal Budget Director. Greenspan also worked on several task forces and commissions, and served on the board of directors for numerous private companies. In 1987 he was appointed chairman of the Federal Reserves where he served until 2006.

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¹ Greenspan returned to graduate school during the 1970s and completed his Ph.D. He also remarried in April 1997.

² The Council of Economic Advisors is essentially a small consulting firm with a single client: the president of the United States.

Managing the Turbulence

This section outlines some of the policy actions taken and the results observed during times of economic instability in the United States. The source of the turbulence was sometimes generated from domestic activity; however, exogenous shocks also required policy makers' initiatives in steering the economy from undesirable outcomes. Principles outlined in Greenspan's account are still very useful today, as many countries have adopted similar policies to help stave off the adverse effects of the current global financial crisis.

The Inflation Spiral of 1970 – 1975

Greenspan reported that the US economy was growing sluggishly after the Cuban missile crisis in 1962, and the fiscal authority instituted a \$10 billion tax cut to stimulate economic growth. Though this action yielded positive results, the excessive spending on social programmes and the underestimation of the Vietnam War led to a build-up in fiscal deficits. This forced the government to abandon its policy and introduce a 10 percent surcharge on federal income tax. The new tax had a slowing effect on the economy and by 1970 the economy had plunged into a recession. Unemployment reached 6 percent and the inflation rate was growing at an annual rate of about 5.7 percent. The Fed cut interest rates and pumped money into the economy, but while output improved, inflation continued upwards. Public pressure on the political administration led to the adoption of wage and price controls to ease the inflation spiral, but such a policy created its own problems as there were breakdowns in market activity for certain goods within a few months. This result did not surprise Greenspan as he explained that a free-market would eventually undermine any attempt to control prices. President Nixon later acknowledged the inappropriateness of this policy and introduced measures to incrementally revoke it.

The Arab oil embargo of October 1973 significantly contributed to the increasing inflation and unemployment rates, and eroded the confidence of the general public.

The consumer price index rose sharply resulting in a shocking 11 percent inflation rate in 1974. The stock market was in a steep decline and the economy was at the brink of the worst recession since the 1930's. President Ford's new administration³, implemented policies aimed at easing the energy crisis, restraining federal budget growth, and jolted the economy with a one-time income tax rebate to boost families' incomes. Despite public pressures for greater intervention, President Ford heeded Greenspan's caution against panicky spending – noting that it can exacerbate the inflation spiral. In mid-1975 the economy showed signs of a recovery: GDP growth increased rapidly and by October of the same year the economy was expanding at the highest rate in twenty-five years, while inflation and unemployment eased.

The Stock Market Crash of 1987

Another era of severe turbulence, sometimes referred to as 'Black Monday', occurred in October 1987 with the collapse in stock market activity. The economy was thriving and although the Dow Jones Industrial Average (DJIA) had run up by more than 40 percent there were sign of instability building up: the national debt had grown from just over \$700 billion in 1980 to more than \$2 trillion at the end of the fiscal year 1988; the inflation rate had jumped to 3.6 percent from 1.9 percent; and there were concerns about the loss of competitiveness. The Fed increased the discount rate by 50 basis points to 6 percent in order to subdue inflationary pressures and hoped that their action would slow stock market index. The market initially responded in line with the Fed's policy action but fear and panic on Wall Street led to a significant falloff in the DJIA Jones average. On Friday October 16, the Dow fell 108 points and by the end of trade the following Monday it had plunged by 508 points – a 22.5 percent drop – the largest one-day loss in history.

The Fed tackled the crisis on two fronts. The first challenge was to persuade giant trading firms and investment banks not to pull back from doing business and the second was to persuade commercial banks to continue providing credit

³ President Nixon resigned from office in August 1974, and vice president Gerald Ford took over.

to customers and to support other financial companies at reasonable interest rates. In addition, the Fed indicated that it would provide liquidity support to the financial system. From the political side, Congress agreed to cut the deficit, since that was one of the long-term economic risks that unsettled Wall Street. Gradually, prices in the various markets stabilised, and by the start of November the markets appeared to have been settled. The economy held firm, growing at a 2 percent annual rate in the first quarter of 1988 and at an accelerated 5 percent rate in the second quarter. By early 1988 the Dow had stabilized at around 2 000 points, where it had been at the beginning of 1987, and trades resumed along a more sustainable path.

The Technology Boom

The “dot-com” boom (1995 – 2000) provided a high-tech fast-paced environment that transformed business operations. The new technologies gave businesses the capacity to gather and disseminate real-time information, and allowed consumers to track transactions through an online system. Indeed, the boom period had a sustained positive impact on the economy: productivity increased, economic growth picked up, unemployment fell and federal budget deficits were turned into surpluses. Stock market activity also received a boost as both the DJIA and NASDAQ averaged record growth of 30 and 40 percent, respectively within the first year. Total market capitalization grew rapidly to \$9.5 trillion and represented about 120 percent of GDP – significantly higher than the 60 percent ratio in 1990.

Federal Reserves officials became increasingly concerned over the aggressive growth in stock prices: fearing that the development of a stock bubble might trigger an inflation spiral, and that a collapsing market would adversely impact the real sector.⁴ As Fed Chairman, Greenspan raised some of his concerns during a speech and suggested that the market was expanding too rapidly. His remarks initially caused a sell-off, mainly on the suspicion that the Fed was about to raise rates, but the market quickly rebounded and

after a few days had regained all its losses. By February 1997, the DJIA had soared to approximately 7 000 points, which prompted the Fed to increase short-term rates (from 5.25 to 5.50 percent) in order to restrain the market. The DJIA fell marginally a few weeks after but soon regained its momentum and continued its upward path – by mid-June of the same year, it was nearing 7 800 points.

The economy continued to show a strong performance and there was a build up in budget surpluses from tax receipts. In May 1997, a senior official of the New York Fed reported that estimates of the Treasury’s receipts were \$50 billion ahead of projections. Even though the economy was doing well, Greenspan argued that the economic performance was not sufficient to explain the surge in tax receipts. He however suspected that the stock-market effect might be largely responsible for the surge, and encouraged the Fed staff to accelerate its work on estimating the boost to household taxable income from stock-option grants and realized capital gains.⁵

The boom continued over three years and the Fed incrementally tightened interest rates to safeguard the economy against possible overheating and to squeeze excess liquidity from the financial system. By mid-2000 the Fed funds rate was 6.5 percent. This in effect gave the Fed the flexibility needed to provide liquidity that would limit economic damage in the event of a crash. However, the increases in rates did not appear to deter stock market prices as they peaked in March 2000 and remained relatively stable throughout the remainder of 2000. Amidst these developments, Greenspan was intrigued by the multibillion-dollar competition between several telecommunications companies. They were racing to expand the Internet by laying thousands of miles of fibre-optic cable. While demand for bandwidth was increasing exponentially, each competitor was laying enough cable to accommodate 100 percent of the projected overall demand. Greenspan anticipated that the market would fall by 30 to 40 percent since most of the competitors were likely to experience a decline in the value of their stocks, and billions

⁴ Greenspan noted Japan as an example where the stock market and real estate crash in 1990 crippled the economy over a sustained period.

⁵ The budget surplus grew from \$ 70 billion in 1998 to \$ 124 billion in 1999 and to \$ 237 billion in 2000.

of dollars of their shareholders' capital would be lost. At the onset of the second quarter of 2001 the stock market bubble began to contract. By the end of the year the NASDAQ index had lost a stunning 50 percent of its value, while the S&P 500 and the DJIA had declined by 14% and 3%, respectively. Although the total losses were small in comparison with the estimated wealth that the bull market had created, the Wall Street outlook remained gloomy and placed a damper on public confidence.

The build-up in budget surpluses resulted in tax cuts and tax rebates in June 2001. In the months that followed, federal revenues had plunged and the surpluses appeared to have been wiped away. According to Greenspan, this revenue shortfall was a reflection of the stock market fallout – a decline far worse than the experts had forecasted. Just as the bull market had generated the surplus, the post-dot-com bear market had taken it away.

Contagion: The Impact of the Russian Debt Crisis

As the Russian debt crisis of 1998 unfolded, the IMF stood ready with financial aid but Russian authorities made it clear that they had no intention of accepting the economic reform and fiscal management conditions imposed by the IMF. This defiance prompted a withdrawal of the IMF package. With depleting foreign exchange reserves, the Russian central bank was forced to abandon its defence of the Ruble and defaulted on its debt obligations.

The precipitating factor was the drop in the price of oil, which declined to a twenty-five year low of US\$ 11 a barrel. Since oil was a major Russian export, it meant that Russia could no longer afford to pay the interest on its debts.

Russia's default had a significantly adverse impact on the US stock markets. In the last four trading days of August alone, the DJIA lost more than 1,000 points, or 12 percent of its value. The bond market reacted even more strongly, as investors fled to the safety of the US Treasury market.

Banks also pulled back from new lending and raised interest rates on commercial loans. Behind these expression of uncertainty was the growing fear that several years of economic boom was coming to an end. Greenspan, in a speech, indicated that the imbalances caused by the technology revolution and rapidly globalizing markets were beginning to strain the world's financial system and threatening US economic stability. He indicated that the Russian crisis had the potential to destabilise the international financial system and looked for a solution from a globally co-ordinated perspective. To this end, central bankers and finance ministers of G7 nations agreed on a policy to urgently increase liquidity and ease interest rates throughout the developed world. Gradually, the policy effectiveness increased and markets around the world stabilised.

Comment

Many of the issues discussed previously are now being reflected in the current day crisis. As the US economy gained momentum during the period 2004-2006⁶, the Fed incrementally raised interest rates to reverse the threat of rising inflation. During that period the fed funds target rate rose from 1% to 5.25%. At the same time, the US housing market began to falter with prices falling and a rising number of homeowners, particularly subprime borrowers, defaulting on their mortgages. The events that followed led to, inter alia, the collapse of several investment funds, billions of dollars in write-downs, liquidity freezes on the interbank market, major fall-offs in stock market activity, investor panic, bankruptcy of several investment firms and widespread contagion into other sectors and economies.

To mitigate the effects of the financial fallout, both the monetary and fiscal authorities adopted several policy measures. Currently, these measures are quite similar to those outlined in the previous eras and involve massive rate cuts and liquidity support by monetary authorities as well as significant fiscal injections to boost economic activity in various sectors. Multilateral institutions such as the IMF, have already

⁶ Following the devastating events of September 11, 2001, the already fragile US economy was plunged further into a decline. In response, the Fed cut rates in stages (so that in December the target Fed Funds rate was 1.25%) to ease the rapidly deteriorating economic conditions. Although there was a slight pick up in 2002, economic activity generally remained sluggish into the first half of 2003.

provided financing to many countries and stand prepared to offer further assistance if required. Notwithstanding these interventions, economic conditions appear to be worsening, but policymakers are swiftly coordinating efforts to provide additional stimuli to ease the current situation.

The historical account of turbulence in this book is quite relevant and timely as it provides the details of some policy interventions and corresponding outcomes. Indeed, finding the optimal balance is perhaps the greatest challenge in managing an economy and policy makers must therefore be extremely careful when correcting for short-term misalignments. In the current context, serious consideration should at least be given to the future impact of present-day intervention.

Liberalisation: The Great Pillar of Market Capitalism

A number of global forces have gradually altered the world. New technologies facilitated low-cost communications as well as greatly enhanced mankind's ability to direct scarce savings into productive capital investments. The post-war liberalization of trade also helped to open up new low-cost sources of supply and other products that facilitate the forward thrust toward global market capitalism. The embrace of free-market capitalism in the years that followed helped to bring inflation to low levels and global interest rates to single digits.

The fall of the Berlin Wall in 1989 was a defining moment for many of the world's economies. Central planning was exposed as an unredeemable failure and market capitalism began quietly to displace those policies in much of the world. Not only did the economies of the former Soviet bloc embrace the ways of market capitalism, but so did most of the so-called "third world countries" – countries that had been neutral in the cold war but had practiced central planning or had been so heavily regulated that it amounted to the same thing. Communist China, which had edged toward market capitalism as early as 1978, accelerated the movement of

its vast, tightly regulated workforce toward the Free Trade Zones of the Pearl River Delta. China's shift to protect the property rights of foreigners was substantial enough to induce a veritable explosion in foreign direct investment into China.⁷ The investment, along with the abundance of low-cost labour, resulted in a potent combination that exerted downward pressure on wages and prices throughout the developed world. Smaller Asian countries, especially South Korea, Hong Kong, Singapore, and Taiwan, had led the way by adopting developed-country technologies to improve their standard of living through exports.

The rate of economic growth of these and many other developing nations far outstripped the rate of growth elsewhere. The result has been a shift of a significant share of the world's GDP to the developing world. The shift of shares of world GDP since 2001 from low-saving developed countries to higher-saving developing countries has increased world saving to such an extent that the aggregate growth of savings worldwide has greatly exceeded planned investments. The apparent excess in savings, combined with world-wide technology-driven increases in productivity, and the shift of workforces from centrally planned economies to competitive markets, have helped suppress both interest and inflation rates for all developed and many developing nations.

Market capitalism, the engine that underpins most of the world economy, has had a sweeping and positive impact on world development. The reinstatement of open markets and free trade during the past quarter century has elevated many hundreds of millions of the world population from poverty. Admittedly, many others around the globe are still in need, but large segments of the developing world's population have come to experience a measure of affluence.

Lessons

This section summarises what Greenspan sees as some important principles that can be useful in understanding

⁷ FDI in China grew from \$57 million in 1980, to \$4 billion in 1991, and then accelerated at a 21 percent annual rate, reaching \$70 billion in 2006.

and managing certain economic behaviours. According to Greenspan, some fundamental characteristics associated with global growth include:

1. The extent of competition domestically, and especially for developing nations, the extent of a country's openness to trade and its integration with the rest of the world;
2. The quality of a country's institutions that make an economy work;
3. The success of its policymakers in implementing the measures necessary for macroeconomic stability.

While these conditions are essential to prosperity, Greenspan stressed the need for state-enforced property rights and argued that if property rights are not properly enforced then open trade and the benefits of competition and comparative advantage would be seriously impeded.

Another important determinant of economic success is the extent of an economy's flexibility and resilience to shocks. Greenspan referenced the "bounce-back" of the US economy following 9/11 as a testament of economic flexibility, suggesting that flexibility and the extent of property rights are closely related. He emphasized that flexibility is obtained only if the competitive marketplace is free to adjust and allocate property as it sees fit. Therefore, he argues against restrictions on pricing, borrowing, affiliations, and market practices as these generally tended to hinder growth.

Greenspan also outlined that the super-abundance of natural resources – oil, gas, copper, iron ore, – does not automatically translate into the advance of a nation's production and wealth. Many studies have concluded that standard of living in resource-rich countries, particularly in developing countries, were markedly worse than that of other countries and their social indicators tend to be below average. He also noted that societies which aggressively pursue high levels of development tend to borrow against future incomes. Historically, these countries tend to run large government deficits that are financed by fiat money and the ensuing inflation eventually pushes these economies into recession

– as was experienced by some Latin American countries.

In the case of stock market activity, Greenspan underscored three very important points: firstly, there is no way to know for certain when a market is overvalued or undervalued; it does not make sense to fight market forces, therefore direct action against the market may not be useful; and finally, anything said about the market situation may spawn unintended results and hurt the credibility of the monetary authority. As a result he suggested that the monetary authority should focus on its central goal of stabilizing product and service prices to gain the flexibility needed in response to market failures.

Conclusion

According to Greenspan, the story of the past quarter of a century can be summed up as the rediscovery of market capitalism. After being forced into retreat by its failures of the 1930s and the subsequent expansion of state intervention through the 1960s, market capitalism slowly re-emerged as a potent force, and now almost pervades the entire world. The spreading of a commercial rule of law and especially the protection of the rights to property has fostered a worldwide entrepreneurial awareness. This in turn, like the "invisible hand," has led to the creation of institutions that now anonymously guide an ever-increasing share of human activity.

Looking ahead, Greenspan expects that the US economy would continue to grow mainly because of the advance in technology. However, his projections are based on the existence of certain preconditions including: continued adherence to the principle of globalized free markets; the fixing of the dysfunctional elementary and secondary school systems; that the consequences of global warming would be slow enough so as not to significantly affect US economic activity; and finally, that terrorist attacks would be kept in check. Based on historical record and experience, Greenspan asserts that US in 2030 is likely to be characterized by:

1. A real GDP three-fourths higher than that of 2006
2. The increased prominence of intellectual property

rights legislation and litigation

3. A Federal Reserve System that will be confronted with the challenge of inflation pressures and populist politics that have been relatively quiet in recent years.

However, if the Fed is unable to confine the inflationary forces, then the economy could be faced with:

- a. A core inflation rate markedly above the 2.2 percent of 2006
- b. A ten-year treasury note flirting with a double-digit yield sometime before 2030, compared with under 5 percent in 2006
- c. Risk spreads and equity premiums significantly larger than in 2006
- d. Therefore, yields on stocks would be greater than in 2006 (the result of a projected quarter century of subdued asset price increases through 2030), and, consonant with that, lower ratios of real estate capitalization.