THE GREAT WAVE

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"We woke up to discover that we were living in the long run and were suffering for our failure to look after it." Herbert Stein, US economist. 1979.

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Economists ignore a discussion of very long cycles, as it is hardly relevant to short-term economic forecasting and management - their main area of concern. Great Waves of economic activity lasting hundreds of years never come up on the radar screen of the average financial analyst or economist. Despite such oversights, there is strong evidence to support the concept of Great Waves of inflation, economic activity and mass psychology. These have persisted since at least the 12th century and were probably evident in ancient Babylonian and Greco-Roman times. Hackett Fischer (1996) presented the most comprehensive and impressive analysis of the secular trend and this article discusses his approach in some detail. The key reason to study the Great Wave is to try and assess the timing of the crisis phase of the current cycle. The 20th century price revolution should be followed by a crisis phase lasting decades. How this process unfolds remains to be seen.

Structure of The Great Wave

According to Hackett Fischer (1996), there have been very long cycles of rapidly rising prices, which peak then collapse in a period of deflation. Prices then establish an equilibrium fluctuating on a plateau for several decades. His secular trend was broken down into the four Great Waves since 1180. He believed that *"price revolutions have no fixed and regular periodicities. Some were as short as 80 years and others as long as 180 years. They differed in duration, velocity, magnitude and momentum."* Even so, *"they all have a common wave structure and started off in the same way."* Hackett Fischer (1996) also found evidence in the literature of price revolutions in ancient times - Babylon (1840 - 1620 BCE), Greece (450 - 150 BCE) and Rome (400 BCE - 500 CE).

Table 1
THE GREAT WAVE OVER THE PAST 850 YEARS

Great Wave	Price Revolution
1180 to 1350	Medieval
1350 to 1660	16th Century
1660 to 1820	18th Century
1820 to present	20th Century

There are five key stages of the Great Wave.

1st Stage. Prices are stable and reach an equilibrium that persists for several decades. This phase was marked by material progress, cultural confidence, optimism about the future and *"enlarged ideas of human dignity, freedom and the rule of law."* The beginnings of the upward price movement emerge due to accelerated population growth and/or rising living standards. Prices of services and manufactured goods tend to lag behind., which *"improves the lot of the ordinary people"*

The price equilibrium sees real wages rise, but returns on land and capital fall. Inequalities in income and wealth begin to lessen. Families grow stronger, crime rates fall, drug consumption declines, wars become less frequent and less violent, while births outside marriage decline. Internal wars of unification become more common and successful. During the price equilibrium, culture may flower such as experienced in the 15th century (Italian Renaissance), 17th century (the Enlightenment and the Spanish Golden Age) and 19th century (Romanticism). The later stages of the price equilibrium are marked by the ideas of order and harmony.

2nd Stage. Price increases accelerate due to events such as wars of expansion, most notably:

* Rivalries between emperors and popes - 13th century.
* State building conflicts. Late 15th and early 16th centuries.
* Dynastic and imperial struggles of the 18th century.
* World Wars during the first half of the 20th century.

Such events send prices soaring then declining.

3rd Stage. People begin to see inflation as a long-term trend and an "inexorable condition." People adapt to expanding money supply and rising velocity of circulation. Price inflation becomes increasingly institutionalised and more systemic.

4th Stage. Inflation takes hold with prices rising and becoming highly volatile and unstable. Severe price shocks are experienced in commodity markets accompanied by rapid expansion and contraction in money supply. The financial markets become increasingly shaky. Government debt rises as expenditures exceed revenues. Wages lag behind prices, while returns on land and capital increases. This results in severe wealth and income inequalities. Social distress increases in line with rising hunger, homelessness, crime, homicide, births outside marriage, drug and alcohol abuse, family disruption and so forth. People lose faith in institutions and there is a desperate search for spiritual values.

5th Stage. The price revolution peaks and then collapses resulting in demographic declines, economic breakdown, political revolutions, wars and social violence. This crisis phase is catastrophic, with the Black Death (mid 13th century), the 30 Years War (1618 – 1648) and the revolutions/Napoleonic Wars (around 1800). Inflationary pressures are relieved with the accompanying price deflation and falling interest rates. Whole economic, political and social systems are obliterated in a surge of upheaval.

Table 2
CRISIS & EQUILIBRIUM OF THE GREAT WAVE

Crisis	**Stage 5 Key Events**	**Ensuing Equilibrium 1st stage of the new Great Wave**
14th Century	Black Death	1400 to 1470 Renaissance Equilibrium
17th Century	Thirty Years War	1660 to 1730 Enlightenment Equilibrium
Late 18th to early 19th Centuries	Revolutions and Napoleonic Wars	1820 to 1896 Victorian Equilibrium
21st Century	????	????

The crises of the 14th and 17th centuries appeared to be worldwide events, according to Hackett Fischer (1996).

14th Century. In China, the Sung dynasty disintegrated and was followed by an era of anarchy. Rapid depopulation was experienced, due to social violence, economic breakdown, famine, floods and political chaos. Similarly in India, the Delhi Sultanate collapsed after it had extended its power over nearly the whole subcontinent. Furthermore, in central Mexico, the Toltec culture was overrun by the Aztecs, while the pre Incan states of the South American Andes disintegrated. Islamic culture of the Middle East also entered a long decline, from which is has never fully recovered.

17th Century. The Ming Dynasty in China ended following the onslaught of disease, disorder, falling population, growing inequality, famine and pestilence. These were the first population declines in China since the 14th century crisis. In India, the Mogul Empire also collapsed leaving India an easy target to the predations of European powers. In the Middle East, the Persian and Ottoman Empires began decaying.

Unfettered flows of money and speculation are highly destabilising, ultimately destroying whole economies and obliterating social systems near the top of the Great Wave. Hackett Fischer (1996) concluded that, *"far from being a benign or beneficent force, the market when left to itself is an unstable system that has repeatedly caused the disruption of social and economic systems in the past 800 years."*

The 510 Year Cycle of East - West Ascendancy

According to Dr R H Wheeler, a 510 year cycle was evident in trends of imperialist dominance between Asia and Europe (Epperson, 1990), a finding which has been summarised in Table 3. In Wheeler's approach, European world domination ended about 1980 with a shift of economic and political supremacy from the West to Asia. Wheeler's view is very interesting given the rapid economic rise of China and India during the 21st century, which has been accompanied by the decline of the American empire. The East – West secular trend should be interconnected to the Great Wave in some manner, although no evidence can be offered to support this speculation.

Table 3
WHEELER'S 510 YEAR CYCLE OF WORLD DOMINANCE

Time Frame	Dominant	Trends
670 BCE – 50 BCE	Europe	Alexander the Great. The Ptolemies. Beginning of the Roman Empire.
50 BCE – 450 CE	Asia	Rome in decline. Several great empires established in the East.
450 CE – 960 CE	Europe	Byzantium. Charlemagne.
960 CE – 1470 CE	Asia	Genghis Khan. Kublai Khan. Ottoman Empire expands. No great imperialistic growth in Europe.
1470 CE – 1980 CE	Europe	European expansionism and the American 20th Century.
1980 CE – 2490 CE	Asia	Asian dominance?

Source: Epperson, 1990.

Discussion & Conclusions

To explain what sets the price revolution in motion, Hackett Fischer (1996) discussed several causal models including Marxist, monetarist, agrarian, climatic, neo classical and so forth. He concluded that *"each of these seven causal strategies helps to explain important aspects of our problem. None suffices to resolve it."* Thus the causal basis of the Great Wave remained enigmatic.

The 54 year Kondratieff Waves are linked to the Great Wave. Braudel (1984) believed that *"by adding their movements to the upward or downward secular trend, the Kondratieff Waves either reinforce it or attenuate it."* There is some evidence to support this view, as Kondratieff Waves have been extended back into the pre-industrial era. Imbert (1959) dated long cycles going back continuously to the 13th century and Irsigler & Metz (1984) into the 15th century. Problems arise as to the quality of the available long-term series spanning many centuries, which cast doubt on the timing of the early Kondratieff Waves. As noted by Hackett Fischer (1996), the Great Waves *"have been documented in many studies and are the most robust pattern of secular change in the history of prices - more so than Kondratieff cycles or any other cyclical rhythm, which must be derived by 'detrending' the data."*

Hackett Fischer (1996) believed that "*we are living in the late stages of the price revolution of the 20th century. Disaster does not necessarily lie ahead for us*." "*What happens in the future is contingent on our choices in the present, which we derive from our memory of the past."* In 2002, Hackett Fischer commented "*We've come to a major break in price systems. I think we can say it probably started in the 1990s. So we are now nearly a decade into a new era* (of equilibrium)*"* (Hartcher, 2002). As for the historic breakdown associated with the inflationary peak, Hackett Fischer believed that the 20th century price revolution *"did have a cataclysmic end, but not for us. It was a disaster for communism and socialism."* Capitalism *"had inflation as a method of rationing goods. The communist bloc couldn't because they didn't use market pricing. They did it another way with physical rationing and a system of favoured access for the elites, which destroyed the morale of the system."* Alas, Hackett Fischer's speculations on the crisis of Stage 5 proved premature. The current world situation has more indicative of the crisis phase, with a major break in price inflation, economic distress, increasing inequality and cynicism with the established order, Around the world, political leaders are elected who in more rational times would be seen as buffoons – Trump (USA), Tony Abbot (Australia), Boris Johnson/Nigel Farage (UK) and Duterte (Philippines). The election of President Trump may prove to be a key destabilising event in the history of the Great Wave.

The gross inequities of global capitalism have fuelled the growing resentment of the disenfranchised masses. The outcome was Brexit and the election of Trump and this is only the beginning of the crisis phase. The whole system needs to be reformed, but this is unlikely to happen. In the previous Great Wave, the French elites had an opportunity to make reforms at the Assembly of Notables in 1787. They refused as it would have meant that they would have had to pay their fair share of taxes and the rest is history with the French Revolution and the rise of Napoleon. There is very little reason to think that this time around will be any different.

The best outcome would be for humanity to muddle through without something truly catastrophic happening. However, this may not be the case considering human stupidity and trends in previous Great Waves. The looming upheaval could be triggered by wars/revolutions, social distress, disease or environmental collapse. Only time will tell. On the positive side, the crisis will be followed by a new price equilibrium lasting between 50 and 90 years. Hackett Fischer (1996) commented that "*At first inequalities continued to grow as the lag effect of the preceding price revolution. But as the new dynamics took hold inequality began to diminish.*" The equilibrium should also manifest with improved real wages, lower interest rates, lower returns to capital, less violence, stronger family connections and reduced drug abuse. Foreign wars will be less severe, while internal wars of unification become more prevalent. Culture may flower as in the Italian Renaissance, the Enlightenment and Victorian Romanticism. It will be very curious to see how the crisis phase and new price equilibrium unfolds. We live in interesting times.

References

Braudel, F. 1984. The Perspective of the World: Civilisation and Capitalism 15th - 18th Centuries. William Collins & Sons. p 78-87.

Epperson, D. 1990. Wheeler's Climate Curve & War: The Evidence? *Cycles.* Vol 41 No 5. p 265.

Hackett Fischer, D. 1996. The Great Wave: Price Revolutions & the Rhythm of History. NY Oxford and Oxford University Press.

Hartcher, P. 2002. Our Place In The 80 Year Pricing Cycle. *Australian Financial Review*. p 25. February 1.

Imbert, G. 1959**.** Des Movements de Longue Duree Kondratieff. La Pensee Universitaire.

Irsigler, F & Metz, R. 1984. The Statistical Evidence of Long Waves in Pre-Industrial Times. *Social Science Information*. Vol XXIII, No 2, pp 381-410.

Kondratieff, N D. 1935. Long Waves in Economic Life. *Review of Economic Statistics.* XVII. November.