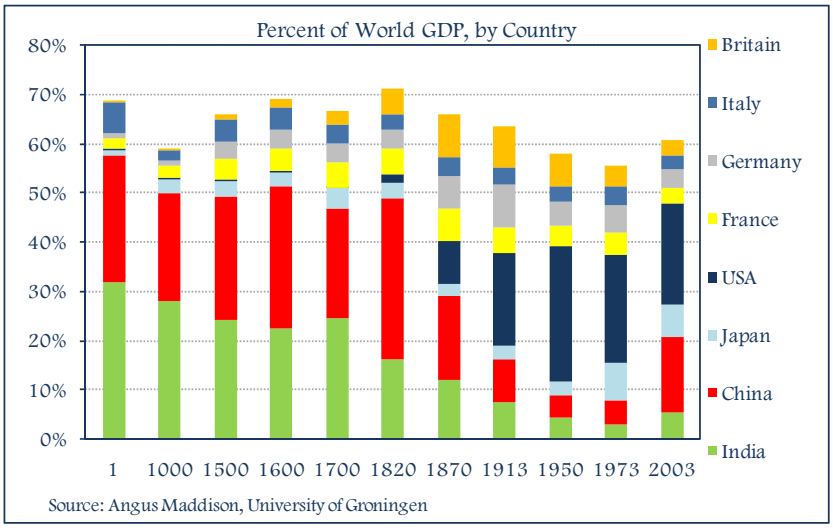
Agincourt Capital Management, LLC

February 2011

Investment Update

We see a lot of charts, graphs and tables in our business, most of them coming from the research that hits our email buzzer multiple times a day, but when the chart on this page came across our desk last week we had to take a step back and say, "Wow!"

The chart, which was famously published last summer in an article in *The Economist* (how did we miss it the first time around?) represents, in one little graph, nothing less than the history of global finance over the past two thousand years. The data for this graph was collected (if that's the right word) by a man named Angus Maddison, who made the study of historical world finance his life's work. Sad to say, but The Economist's article came a few months too late for Dr. Maddison, who died last April at the age of 83.



Maddison's magnum opus, *Contours of the World Economy, 1–2003 AD*, was published in 2007. In it, he laid out his methodology: First, he estimated what each individual in a country's population was capable of producing. Since ancient populations were essentially agrarian, per capita output was best measured in units of farm produce, which in turn were converted to monetary units. These per capita figures were then multiplied by the country's population to get an estimate of the total GDP for that geographic entity.

Obviously, in "pre-modern" times, there was little to distinguish between the productivity of various countries—it took essentially the same amount of effort to produce a bushel of grain in Egypt as in Rome, and rice was cultivated by similar methods whether in China or India. Population size was far more important, two thousand years ago, than any per capita measure when determining the output of a country. Thus, we see that China and India, with their huge populations, dominated world GDP around the time of Christ. "Italy," representing the Roman Empire, was the lone Western economy to show any significant impact. Rome, as we now know, was quite advanced as a society for its time.

But the Roman Empire, which eventually stretched from the British Isles to present-day Iraq, and which traded overland with China and via sea routes with India, was split in half in the third century, beginning its eventual decline. Over the next few hundred years, the Roman Empire's regional dominance in trade, legal framework, literature and arts, social structure, roads and other public works all but disappeared as the Empire was overrun by illiterate and semi-civilized barbarians. For much of Europe, Mediterranean Africa and the Middle East, society took a giant step backwards towards a disorganized agricultural state. After the fall of the Empire, it would take nearly ten centuries for "Italy" to regain the per-capita output that it had in the first century AD.

Meanwhile China was advancing, with the Tang and Song dynasties (covering the 7th through the 13th centuries) proving to be a golden era for advancement in commerce, agriculture and the arts for China. It is estimated that China's population doubled during this period, exceeding 100 million people.

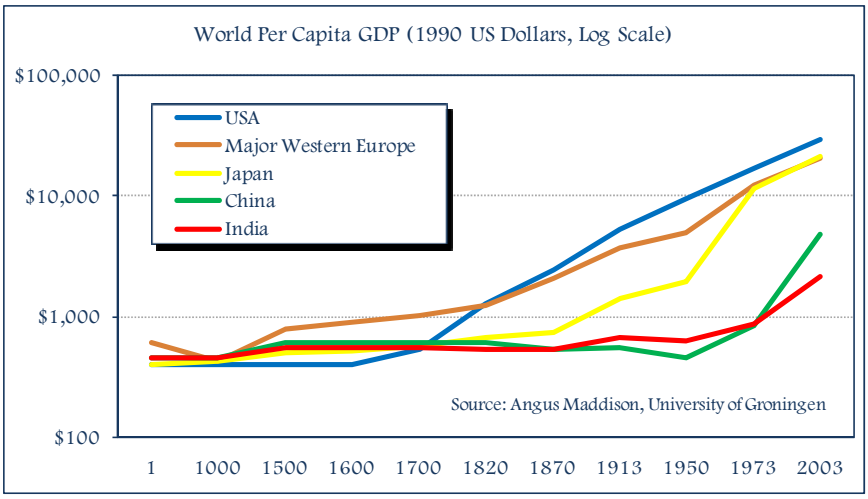
Western Europe slowly recovered; the medieval historian Lynn White wrote: "The heavy plough, open fields, the new integration of agriculture and herding, three field rotation, modern horse harness, nailed horseshoes and whipple tree had combined into a total system of agrarian exploitation by 1100…" Europe, as documented in Jared Diamond's colossal book *Guns, Germs and Steel*, benefitted enormously from an east-to west geography that allowed hybridization of crops that could maximize production over an entire continent, all with a similar latitude. A stable and ample food supply allowed Europeans the luxury of developing specialization of labor—including administrators and bureaucrats, craftsmen, merchants, and even academics—since not everyone had to be toiling in the fields.

As the chart on the back page shows, the per capita GDP of Western Europe, which had been surpassed by China after the fall of the Roman Empire, eventually recovered, and during the period between 1000 and 1500, surpassed that of China. China's and India's huge population advantage meant that they still dominated world GDP, but on a per-person basis, by the sixteenth century Europe had jumped out to a lead they would not relinquish for 300 years.

With the advent of global shipping and trade in the sixteenth century, worldwide production took a higher trajectory upward. After roughly doubling between 1000 and 1500, global GDP grew by 1/3 over the next century alone.

In the fifteenth century, China had the upper hand in shipbuilding technology, with ships that were bigger, more watertight, more comfortable, and able to navigate greater distances than those in the west. This technology (and other unrelated technologies, including glassblowing and textile production) was quickly adopted by Portuguese and Venetian shipbuilders and was steadily accumulated and built up over the next two hundred years throughout Europe. During this period, China turned its back on international expansion, and there was little interest among the Chinese elite in Western technology; these choices would have dramatic, long-term consequences.

Technology advanced at a rapid rate over the next two hundred years in Western Europe, and the sharing of technology was facilitated by universities, open communication across countries by leading scientists and inventors, and the printing press. Specialization still occurred, with Portugal having natural advantages in shipping, followed by the Dutch, who also took a leading role in global banking and credit. By the end of the 18th century, technological advances, along with colonization of the West Indies, Africa and especially North and South America, had propelled Western European countries into a dominant position to control the flow of goods around the globe while rapidly expanding the wealth of these nations.



Colonization also allowed for the exploitation, if not outright extinction, of indigenous populations. North America was exceedingly fertile from an agricultural standpoint (the east-west geography in present-day USA had many of the climatic advantages of Europe) and with the addition of slave labor from Africa, per capita GDP exploded. The North American colonies also benefitted from the transfusion of technology and institutions from Europe; by the time of the American Revolution, there were nine universities in the thirteen colonies, compared to just two in all of Central and South America.

The Netherlands was an early beneficiary of colonization, dominating world trade in the seventeenth century, and leading world per capita GDP for nearly 200 years. The Dutch East India Company, the world's first international corporation, built a massive shipping fleet, and established multiple trade routes and colonies throughout the Far East, as well as present-day India, Bangladesh and Iran, nearly monopolizing the silk and spice trade. However by 1670, competition from the British East India Company (along with competitors from Denmark and France) began to erode their market share. Of these, England emerged as the winner in both global trade and successful colonization, as the British Empire became the world's dominant economic force; by the mid-1800s, the UK surpassed the Dutch to lead the world in per capita GDP.

The technological innovations of the Industrial Revolution, along with an abundance of natural resources, broadened the gap between East and West throughout the 19th and first half of the 20th centuries. Japan, alone among Asian nations, adopted some of the best practices of Western innovation, but remained hampered by a highly structured and feudal society that was distrustful of foreigners. India benefitted from foreign investment, especially from England, but their societal traditions hampered economic growth. War, famine, mass emigration and hapless imperial rule crushed the Chinese economy in the nineteenth and early 20th centuries; shockingly, by 1950 China's per capita GDP had fallen back to levels equal to those of 1000 AD. Meanwhile, by the end of the nineteenth century the United States surpassed the UK (and all other nations) to take the lead in per capita GDP.

After World War II, the Japanese economy became the "miracle" of global trade as their share of world GDP more than doubled, with per capita GDP increasing by an astounding 600% in the 25 years after the war. Assisted by the collapse of European colonialism, Japan effectively closed the economic gap on Western economies in less than three decades. Truly astonishing.

Now, we see that the two sleeping giants of Asia, India and (especially) China, are finally beginning to wake up and take advantage of their huge potential. With populations of 1.2 and 1.3 billion, respectively, these countries have labor forces that could collectively dominate world trade, even if their workers' productivity was just half of that of Western economies. The most recent estimates show China's per capita GDP at $4,803 and India's at $2,160; these pale in comparison to those of major Western European countries ($20,600), Japan ($21,218) and the US ($29,037). Nevertheless, East Asian growth is far outpacing Western countries' growth, and the gap is closing between the so-called "developed" world and developing countries in Asia and elsewhere, as they move away from their agrarian roots into more modern economic systems that embrace Western technology and liberate their citizens. It seems clear that both China and India will one day surpass the US as the world's biggest economies.

It must be said, however, that while the early stages of this transformation will show huge gains (look at China over the past two decades), the Japanese experience has demonstrated that playing catch-up with advanced economies becomes increasingly difficult as the gap closes. Western economies are keen to maintain their competitive advantage and have a significant head start in facilities, structure and technology.