

Arithmetic Deniers and Global Financial Stress

By Randall Morck and Bernard Yeung (July 2012)

The global economy is a dynamic and resilient system that can tolerate a lot of political meddling, yet still deliver high standards of living to the upwards of a billion people who live in Europe, North America, the developed economies of the Asia Pacific as well as the growing middle classes of Brazil, China, India and a handful of other promising places. But the tolerance of this system is not infinite, and we are increasingly worried that special interest groups pursuing overtly political agendas are creating enough stress to cause fractures. While pressures are building up in many places, the most overt stress these days is on the global monetary system. This stress is, in our view, the result of romantic Americans, Europeans, and Chinese thinking they can amend the laws of arithmetic.

Americans do not think of themselves as romantic people. For decades, the U.S. has been the world's economic powerhouse – a country of practically-minded inventors, engineers, and financiers. The U.S. dollar was for decades the world's dominant reserve currency – other countries' central banks held reserves of U.S. dollars to back up the values of their national currencies – and this system worked as long as U.S. politicians, regulators, and central bankers behaved mostly responsibly.

This was always something of a gamble because America can drift into occasional inward looking political fugues, during which the global system becomes an afterthought, if that. The 1970s US inflation was such a period, and we could now be in another.

American politics is currently thoroughly fugued up; with its polarized politicians romantically uniting to amend the laws of arithmetic. The left sought to decree the poor into respectable householders; ignoring the arithmetic problem that family income minus mortgage payments needs to be above zero. The right pledged “no tax hikes!” while denying that military adventures plus costly new entitlements equals tax hikes. Both sides repeatedly deny romantic naïvety, and avow profound and farsighted objectives instead. If we take U.S. politicians at their words, the only conclusion is that arithmetic itself is under attack.

In the late 1990s, the world adapted to a dual reserve currency system as the euro began to compete with a free-floating dollar. The European Central Bank romantically decreed all euro-zone government bonds equal. This equality let Irish politicians insure

banking systems far beyond their taxpayers' means and let Greek politicians, tempted by cheap loans, win elections by committing to government spending far in excess of tax revenues. Any arithmetically inconvenient details were to be circumvented by selling even more government bonds.

When investors unromantically refused to buy into this, the most arithmetically-challenged governments sought bailouts. With bailouts on offer, the laws of arithmetic were again suspended. In a confidence game, no-one wants to be the sucker. Spanish politicians bailed out their countries' overextended banks, transforming their nonperforming mortgages into additional government debt, and thereby transforming a previously solvent Spanish central government into a prime candidate for the next round of E.U. bailouts, with the Italians and French watching attentively. Romantic northern European politicians, seeing generous bailout payments as a fast track to deeper political union free of troublesome referendums, cooperated at every step and somberly present a polar choice: death by euro breakup or swallow more power sprouting from Brussels. This decidedly European mixture of political romanticism and cynicism – one is never sure of the true proportions – protracts the financial stress in weak European economies, and subjects otherwise strong European economies to a financial Chinese water torture.

With the North Atlantic surrounded by arithmetic deniers, attention rightly turns to the reviving power of China. The Chinese economy is, by some measures, the second largest in the world; but the yuan, China's currency, remains decidedly unimportant outside its borders. To be sure, American politicians of both its left and right sporadically argue that an artificially valued yuan and government controlled capital markets are economically unfair subsidies to Chinese manufacturers. As the US dollar and the euro sink, such complaints seem increasingly romantic. The rest of the world appears readier than ever to accept a degree of Chinese economic leadership.

But China's rulers resist rolling out the yuan as a third global reserve currency. A reserve currency must be freely available to other countries' central banks. The US dollar and the euro, for all their arithmetical problems, float freely – they can be bought and sold 24/7 throughout the world and their values rise and fall to keep the amounts of each being sold equal to the amounts being purchased. The Chinese yuan, in contrast, can be legally bought and sold only in China and in a handful of foreign locations officially approved by the Chinese government. This control lets the government set the value of the yuan by decree, without the nuisance of demand always having to be equal to supply. Communist governments never liked this sort of arithmetic, and many of China's key leaders, for all the reforms of the past decades, are still romantic Communists at heart.

As politicians worldwide commit ever more firmly to the notion that two plus two can equal whatever they like, US growth sputters, European defaults proliferate, and China's rise slows. With demand from the US, Europe, and China weakened, other economies are sputtering. The Australian and Canadian economies are cooling; Brazil's growth is weakening; and so is India's. Japan's economy remains stuck in low gear.

This situation cannot last forever. The Americans and Europeans both have histories of suddenly snapping out of their romantic fugues, and post-1978, China's current crop of Communists have an unusually practical bent. Deng Xiaoping's homily about the unimportance of fur color as long as a cat catches mice is not forgotten.

But global arithmetic denial has lasted far too long, created too much volatility and uncertainty, all at far too great a cost. Something has to snap. Appeals to rationality are unpersuasive to romantics, so we fear no alternative remains save ridicule. Romantics dislike being ridiculed.

In 1897, Representative T.I. Record of Indiana earned a place in the history of mathematics by introducing legislation to define π .¹ Arguing that "Since the rule in present use fails to work ... , it should be discarded as wholly wanting and misleading in the practical applications," the legislation set the circumference of a circle equal to 3.2 times its diameter (though alternative values were allowed for calculating areas and trigonometric ratios). Altering π would have altered the nature of physical reality. Luckily, this not only lay far beyond the writ of the state legislature, but also brought a barrage of ridicule down upon the politicians and the great state of Indiana. Fear of ridicule has immunized π from political interference for over a century now.

Could such ridicule save the world again? The omens look good but the process is painful and the outcome unpleasant. Americans will, in the long run, accept that taxes must equal government spending, whether for medicine or the military. Government revenues come from taxing, borrowing, or printing money. Printing money causes inflation. Although many Americans are too young to remember the 1970s, high inflation is not likely to be an election winner. Raising taxes is anathema to the right; genuinely cutting spending seems anathema to both the right and left. The only solution under serious consideration from both sides is borrowing more. America can still borrow at remarkably low interest rates, mainly because other sovereign borrowers look even dodgier, so an upward spiral of debt seems the path of least resistance. But ultimately, America will have to pay back these loans, by cutting spending, raising taxes,

¹ Editor's Note: To the uninitiated, π (or " π " in Greek), is a mathematical constant and transcendental number. It is the ratio of a circle's circumference to its diameter, and is approximately 3.1415926535...

or printing money. If cutting spending and raising taxes remain impermissible, an inflationary future looms.

Wisconsin voters recently rejected the recall of an arithmetically-literate state governor who bluntly announced the consequences of the state's budget adding up. One dares hope that the arithmetically literate might be the swing voters in America's upcoming elections. But much of the ongoing campaign rhetoric denies arithmetic as vigorously as ever. Opportunities for ridicule abound. In Europe, the choice is not between disaster and a deeper political union, as much as romantic Europhiles wish it were. The current system could be modified by letting the European Central Bank concede that all euro-zone government bonds are not equal, and by letting Greece (population 11 million) go through an orderly default – much as Orange Country (population 3 million) did in 1994. Orange Country did not have to leave the dollar, and Greece need not leave the euro, though some Greeks might want to. The real problem, as in America, is political operators telling people that arithmetic can be repealed.

In the most recent replay of Greece's political tragedy, well-ridiculed arithmetic deniers lost to a "pro-arithmetic" party willing to accept fiscal responsibility in return for a bailout. But Spain's bank bailout leaves its taxpayers with huge interest repayment obligations, its government unable to borrow further, and its political elite open to ridicule. Angela Merkel may be right to stall: absent bailouts, private investors refuse to buy bonds issued by arithmetically challenged governments, forcing them to balance their budgets. French voters continue to deny arithmetic, romantic pro-integration politicians continue spreading fear to accelerate their agenda, and Europeans still take to the streets, demanding in their tens of thousands that arithmetic be suspended. Pro-integration politicians continue to present a bipolar choice between ruin and Brussels. Deeper political integration may well be a laudable goal, but banking reform and union-wide fiscal and monetary stimuli are all feasible with minor tinkering to the current system. Ridicule has made progress, but much more is needed.

China also balks at real economic reform. The Communist Party's constitutionally-mandated Leading Role thwarts the rule of law, and makes all other reforms little more than window dressing. Recent scandals dismay thoughtful Chinese, but may help real reformers gain power. Without the rule of law, China cannot develop efficient capital markets. Rather, wasted resources and squandered opportunities pile up, and growth will eventually stall. Perhaps China will be mired in pitiable stagnation; extreme pessimists fear a dramatic large-scale economic collapse. Either would have deeply negative ramifications for the rest of the world.

The basic problem is a twofold denial of arithmetic. First, the Party equates its Leading Role with arbitrary discretionary power vested in individuals high in its hierarchy. A Leading Role could easily be otherwise defined. Second, Chinese savers, perhaps because of lacking of choices, continue pouring money into state-controlled banks, which continue lending primarily to state-owned enterprises with increasingly shaky long-run prospects. The value of the banks' obligations to their depositors (and other investors) should equal the value of the bank's outstanding loans and other assets. Exhortations for harmony cannot banish this arithmetic. We do not encourage anyone to ridicule China's profoundly intelligent leaders, but it might happen anyway.

All arithmetic denial is surely ridiculous. Neither European political deepening, nor American populism, nor Chinese harmony can make two and two equal anything but four. At some point, this will become obvious to most people, and leaders will have to scramble to seem, at least, to be leading. Perhaps telling the truth might actually get leaders elected in Europe and America and promoted in China. We cannot guarantee this, but we can guarantee that telling people the truth will save politicians from ridicule – perhaps not now, but for certain in yet unwritten history books.

What might arithmetic portend? Americans might have to confront higher taxes and lower public spending, exposing the bipartisan arithmetical ignorance that currently paralyzes Washington to ridicule. The European Central Bank might be allowed to treat Euro-zone government bonds that are junk as junk, leaving governments that destroy their creditworthiness to live without credit and politicians who abetted this to endure ridicule. The Chinese Communist Party might have to qualify its Leading Role by subjecting itself to the rule of law. To postpone such will lead to dire consequences, politicians may view sacrificing arithmetic as a small price to pay (they may not all appreciate the ridicule angle). Unfortunately for them, arithmetic is not for sale.

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