

## The Stuxnet Paradigm

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“The ‘relativity of truth’, in the sense that all knowledge is partial and corrigible, is often stated with an emphasis that is strangely disproportionate to the obviousness of this incontrovertible fact. What we understand here by this concept of the relativity of truth is evidently quite different: relativity is not a qualification of an otherwise independent notion of truth but is the essential feature of truth. Relativity is the mode in which representations become truth, just as it is the mode in which objects of demand become values. Relativity does not mean – as in common usage – a diminution of truth, from which something more might have been expected; on the contrary, it is the positive fulfillment and validation of the concept of truth. Truth is valid, not in spite of its relativity but precisely because of it.”

George Simmel, The Philosophy of Money (1907)

### Egypt

Events are moving quickly in the Middle East and do not bode well for global stability. Regime change in Tunisia, a peripheral Moslem state, now threatens Egypt, an important U.S. and Israeli ally.<sup>1</sup> People have taken to the streets in Yemen, Jordan, and other countries. It is far too soon to determine whether popular revolutions will lead to free societies or to the tyranny of the mob. The majority is often captured by the madness and cruelty of crowds. What is certain, however, is that the political landscape is changing before our very eyes.

Egypt’s importance is strategic, not economic. With a GDP of only US\$200 billion (less than 4 percent of world GDP), Egypt is not an economic power. Aggregate U.S. exports to Egypt are only US\$6.5 billion. Egypt is not a particularly important oil producer, but is important due to its control of the Suez Canal. There is concern that the canal could be

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<sup>1</sup> There is also growing pressure on the regime in Yemen, but it is difficult to see how much worse Yemen could be in terms of a problem for the United States. Yemen is reportedly the primary training ground of Al Qaeda, so any regime change could hardly make things much worse.



closed, adding approximately two weeks (6,000 miles) and extra costs to oil tankers' journeys from the Persian Gulf to Europe and the United States. Oil had been rising prior to the Tunisian uprising and Brent crude traded above \$100/barrel on January 31 after a weekend of Egyptian unrest. Gasoline prices in the United States are already well above \$3.00/barrel, so this is the last thing U.S. consumers need at this point in time (although the recent GDP release suggests that they are feeling no pain and are freely spending once again, which speaks to their short memories and general profligacy).

Egypt has long been an uncomfortable bedfellow for the United States in terms of its highly undemocratic political system, but it has been an essential piece in the strategic puzzle in terms of maintaining stability in the region. If Mubarak were to fall – an event that now seems a matter of when, not if – there could be an opening for anti-U.S. and anti-Israeli forces to disrupt the important strategic relationships that have been built up over the last thirty years. Even if Mubarak is able to hold remain in power for the moment, his time has passed. He moved too slowly to introduce democracy into his country due to fears of Islamic fundamentalism and an autocratic mindset that he shares with many other Middle Eastern rulers. Now it is too late to make changes and he is going to be forced out of power.

What is abundantly clear is that it is far more difficult for autocracy to survive in the age of *Facebook* and *Twitter*. Opposition can gather in cyberspace and then be organized in physical space to a degree that was not possible even twenty years ago. This is why one of the first things the Mubarak regime attempted to do was close down Internet access inside the country. The Internet has become consonant with intellectual and political freedom. This is also why a revolution in a minor country like Tunisia can spread to a country of such major importance like Egypt in a matter of days, and why tyrants as distant as Venezuela's Hugo Chavez are now concerned that riots in the Middle East may threaten his rule. We live in an age in which rulers can no longer hide their failings from their people. This is why *Wikileaks* remains a necessary evil as I wrote last month. Apparently Egyptians were listening in 2009 when President Obama spoke at Cairo University and, when he was not apologizing for alleged past American mis-deeds, was calling for the spread of freedom and democracy in the Middle East. Egyptians no longer want to live less free and fulfilling lives than their Western neighbors, and the same is true of Iranians and the same is undoubtedly true of Venezuelans as well. These regimes, like Mubarak's, will soon be faced with the same stark choices of retaining power through violence or surrendering power to the people. This is no guarantee that democracy will reign, but the systems that emerge will hopefully be an improvement over the autocracies that exist today.

And one final thing should be noted as the world waits to see the outcome in Egypt and whether regime change spreads. The strategic picture in the Middle East would be very different if Saddam Hussein were still in power in Iraq. The war in Iraq can be viewed as cynically as one wants, but it did remove a tyrant and create the chance for democracy to



exist in what was once one of the least free countries on the planet.<sup>2</sup> It should be noted that the removal of Saddam made the Middle East more hospitable for American and Israeli interests as power now shifts in new directions in the region. George W. Bush may have the last laugh yet with respect to his dream of bringing democracy to the Middle East (and yes I realize that will gall many of my readers, but it is an idea worthy of consideration).

Finally, watching Tunisians and Egyptians rally for the right to govern themselves, the many young American men and women who have returned from Iraq and Afghanistan with serious injuries, and the families of those soldiers who did not return alive, should gain some comfort in knowing that their sacrifices were not made in vain.

### **Economic outlook**

Later in this letter, we discuss at length the Trojan horse-like Stuxnet virus that was used to attack the Iranian nuclear weapons program. Briefly, that virus worked by causing the centrifuges inside the nuclear reactors to speed up and spin out of control until they destroyed themselves. It seems to *HCM* that this virus is also a vivid emblem of the forces that are destroying the U.S. and other Western economies from within. As those of a bullish persuasion swoon over a decent fourth quarter 2010 GDP print, those of us who tend to see the glass as half-empty worry about the Herculean gobs of government stimulus that were required to get the U.S economy to a number that still falls far short of previous recoveries.

As David Rosenberg reminds us, the Federal Reserve lowered the federal funds rate from 4.5 percent to zero; the Federal Reserve's balance sheet expanded by more than US\$1.5 trillion (almost tripling in girth); approximately U.S.\$1 trillion of M2 money supply was printed; and U.S. government debt expanded by US\$4.8 trillion. Hidden within these numbers were billions of dollars of direct investments into the nation's largest banks, General Motors and Chrysler, as well as AIG. Many argue that this massive government support effort was far better than the alternative – which was almost certainly a severe Depression – the truth is that we will never know how what would have happened had the nation been forced to take its medicine will compare to what will eventually happen if current budget and deficit trends are not reversed.

There is an adage that says that it is better to dance with the devil you know than the devil that you don't know. In this case, *HCM* is not so sure. *HCM* could actually think of far worse outcomes than the United States following the path of Japan (not that we are in any

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<sup>2</sup> Some cynics argue that the Iraq War was about the United States gaining control over Mideast oil, but America's subsequent failure to formulate a meaningful energy policy or take control of Middle Eastern oil fields belie such conspiracy theories. The only entities benefitting from sky-high oil prices are the autocracies that control so much of the world's oil (Russia, Saudi Arabia, Venezuela, etc.) and the multi-national companies forced to do business with them.



way promoting that outcome). Japan's economy and society, despite their imperfections, are far from a worst case scenario in terms of stability and quality of life. The question is whether the United States will do better than this and successfully revive its economy on a foundation of productive investment and growth, or whether it will do worse than Japan in terms of social stability and quality of life since ours is a far more fractured society than Japan's. All of these possibilities are still on the table, but for the moment the United States is operating like an Iranian nuclear reactor spinning faster and faster on a steady stream of cheap debt and remains at risk of spinning out of control.

### **Risk appetites are rising**

The appetite for risk in the credit markets is rising appreciably as investors react to a combination of a slowly improving economy (at least on the surface) and the Federal Reserve's policy of providing free lunches to anybody willing to eat them. The yield on junk bonds has dropped from about 25 percent at the height (or nadir) of the financial crisis to about 7 percent today. Interestingly, as our friend Leon Cooperman pointed out during his last appearance on CNBC's *Squawkbox* on February 1, this collapse in yields has occurred while the multiple on stocks has remained in the low-to-mid teens.<sup>3</sup> In addition to rendering stocks pretty attractive (especially on a bottom-up basis), this calls attention to the increasingly poor risk-reward offered by the always cyclical junk bond market.

While the bank loan market remains an attractive place to invest (our two favorite picks remain KKR Financial Holdings LLC (KFN) and Tetragon Financial Group Ltd. (TFG1.EU)<sup>4</sup>), private equity sponsors are again doing what private equity sponsors do and are pushing the envelope with covenant-lite deals and dividend deals (when they are not trying to foist the stock of their over-leveraged companies on the public<sup>5</sup>). The floating rate nature of bank debt remains an extremely attractive feature of this asset class as Treasury rates continue to drift upward even in the face of what one might expect would be a flight to safety trade in reaction to events in Egypt. The fact that Treasuries not only failed to rally but continued to sell off in the face of Middle East unrest lends further support to the argument that we can expect higher yields as the year goes forward.

The mortgage debt market has also caught the germ of over-optimism. *Bloomberg* noted in a story on February 2 that even the least creditworthy mortgage paper has been rallying

<sup>3</sup> Mr. Cooperman did note that this comparison needs to be adjusted for the fact that multiples today are based on much higher earnings than the multiples at the depths of the financial crisis, but the different moods of the equity and credit markets are noteworthy nonetheless.

<sup>4</sup> TFG1 continues to suffer from a grossly generous compensation scheme for its management. In the quarter ending December 31, 2010, for example, the firm paid performance fees of \$41.5 mm but only returned \$9.7 mm to shareholders through dividends. The absence of any high water mark with respect to the company's management fees benefits management at the expense of shareholders and should be corrected. Management needs to increase its dividend or risk losing the support of shareholders, without which their company would not exist in the first place. For the moment, however, the discount at which the stock trades to NAV remains too attractive to pass up in view of the excellent prospects for the company's CLO holdings.

<sup>5</sup> It may be too much of a generalization to advise investors to avoid most equity offerings of private equity companies, but then again in *HCM*'s experience it is still probably the right advice 70 or 80 percent of the time.



in price in recent weeks. These are the option adjustable-rate mortgages that gave homeowners the ability to pay lower interest rates in exchange for higher principal balances, which created a Peruvian necktie around their financial throats when housing prices plunged. According to Barclays Capital, these securities rallied by 6 cents to 64 cents on the dollar over the last month. During the financial crisis, these bonds dropped as low as 33 cents on the dollar (if you could get a bid, which was doubtful).

It is not irrational for investors to bid up the price of credit in the current environment; it is entirely predictable as part of the deeply embedded boom-and-bust structure and psychology of financial markets that has characterized the markets over the past three decades. As always, investors will ride the momentum train as long as they can, and some will disembark before it runs off the tracks and some will ride the train over the cliff. For the moment, reasonably steady GDP growth and low corporate and municipal (see below) defaults weigh heavily in favor of the risk trade. On the other side of the scale, however, is the significant tail risk associated with political instability in the Middle East, weak government finances, continued housing weakness that is increasingly suggesting a double dip or an excellent imitation of one, and the fact that the structural economic problems that caused the financial crisis (i.e. an economy built on a vast edifice of debt and policies that favor speculation over productive investment) have only been kicked into the future and not solved.

For the foreseeable future, the biggest risk to fixed income assets will be rising interest rates rather than credit problems. *HCM* has maintained for months that rates rather than credit should be shorted in corporate credit, and we maintain that stance today.

### **Sovereign debt**

Sovereign credit is another story. The recent downgrade of Japan by Standard & Poor's was long overdue. The belatedness of the world in which the credit agencies operates never ceases to amaze us. Standard & Poor's wrote that "[t]he downgrade reflects our appraisal that Japan's government debt ratios – already among the highest for rated sovereigns – will continue to rise further than we envisaged before the global economic recession hit the country and will peak only in the mid-2020s." Talk about being the last to know! While Japan is not going to default, it is likely to face higher interest rates as the cost of servicing its debt outpaces the ability and willingness of domestic savers to finance the country's terminal deficits. The only reason Japan has not gone the way of Greece and Ireland (and soon Portugal and Spain and perhaps Italy, although the latter could probably finance itself by selling movie rights to Berlusconi's life story) is that its economic system is structured in a completely different way than Western societies. Put another way, it is rigged differently than Western economies. The Japanese government has been able to keep the game going due to its deep well of domestic savings, which is a function as much of culture as of economic policy. But at some point the realities of its deficit will be unavoidable, which is why Japanese Government Bonds (JGBs) remain a short.



The financial markets in the United States are acting as though either the European sovereign debt crisis is over or that whatever happens from here on in will have little or no effect on United States markets. This may be a case of being lured into believing that the ability to survive the worst debt crisis since the Great Depression has inoculated markets from losses from any lesser crises. In other words, it is too complacent a view. Germany has now ruled out allowing the European Financial Stability Facility (the “Facility”) to repurchase the debt of troubled countries such as Greece and Ireland (and more to come), leaving the European Union with fewer options for dealing with what is coming (of course, we have to wait and see if Germany is convinced to change its mind at the upcoming meeting of the EU this Friday). According to *Bloomberg*, the European Central Bank (separate from the Facility) has already directly purchased €76.5 billion of bonds from countries such as Ireland, Greece and Portugal to try to lower these countries’ borrowing costs. If the Facility is unable to make similar purchases, the market is likely to continue forcing up the borrowing costs of these countries. Portugal’s borrowing rate is on the cusp of breaking 7 percent, a level that many observers consider unsustainable (Greece and Ireland have long ago surpassed that level and have required bailouts). Germany and France appear to want to pursue policies that are aimed at improving Europe’s long-term competitiveness as well as imposing fiscal discipline on profligate states. That is a commendable long-term policy (one that the United States would do well to follow), and if it prevails it will accelerate the timetable on which additional sovereign credits like Portugal, Spain, Belgium and Italy will be forced to meet their economic makers.

### **Municipal finance**

Meredith Whitney has overplayed her hand. The odds of there being tens of billions of dollars of municipal bond defaults is about as high as the odds of World Wrestling Entertainment, which used to employ Ms. Whitney’s husband John Layfield, presenting a legitimate wrestling match. *HCM* is much more impressed by the work done by our friend David Kotok and his firm Cumberland Advisors in this area. Mr. Kotok and Cumberland take the much more sober and balanced view that municipal defaults are unlikely to explode based on a combination of a sound reading of the improving economy (which is already resulting in higher state revenues) and a deep understanding of the long history of municipal finance.

It is troubling that Ms. Whitney’s apocalypse-now (or, to be fair, apocalypse-soon) call on municipal bonds received so much uncritical media coverage, but Ms. Whitney has shown herself to be a master media player. On the surface, it might be very easy to be impressed by the “two years and thousands of man hours” that Ms. Whitney told “60 Minutes” that she and her staff spent researching the fiscal condition of the 15 largest states. While we certainly have no reason to doubt this claim, it impresses us in the same way some of the more egregious legal bills we have received during our careers have impressed us. What in the world required so much time and effort? It shouldn’t have taken nearly so long to determine that these 15 states are in severe financial trouble and that their options for dealing with it are limited.



But dealing with their financial challenges they are because they have no choice but to do so. Just as Illinois raised its personal income tax from 3 percent to 5 percent, other states will have to either raise revenue or cut expenses. New Jersey Governor Chris Christie, the newest political (and *YouTube*) rock star, has risen to prominence by making that very point and being bold enough to say it in the face of the special interests that are sinking his state and the rest of this country into insolvency. Look at what happened to General Motors. When the company could no longer sustain uneconomic labor contracts, it was left with no choice but to file for bankruptcy and enter into contracts it could afford. If it makes the same mistake again and grants labor too much in the future, it will end up back in bankruptcy court. Life is thought to be very complex, but the fiscal problems of the states are very simple to solve if political leaders tell the truth and do what is necessary. There are going to be very few municipal bankruptcies because municipalities – unlike non-financial corporations or banks (the latter being Ms. Whitney’s area of expertise) – must balance their budgets and possess the revenue-raising and budget cutting powers to do so. The only way they can go bankrupt is if their citizens refuse to obey the law and pay their taxes, in which case they can take out their own garbage and protect their own streets against drug dealers and violent criminals. Couple that with an improving economy that is raising municipal and state revenues as well as even the mere possibility that some lessons have been learned from the current morass in which they find themselves and the prospects for default fade further into the distance.

### **Private equity**

Institutional investors continue to learn little or nothing from their past mistakes. Despite the fact that they continue to fall further and further behind in their ability to meet their future funding obligations, large state pension funds are again allocating money to private equity. While they are reportedly facing \$3 trillion of unfunded liabilities, they continue to chase the same discredited strategies that have disappointed them in the past. \$3 trillion, by the way, is the shortfall that U.S. taxpayers are facing according to a recent study by the University of Rochester and Northwestern University. According to *Bloomberg*, the median state pension fund was only 76 percent funded as of August 20, 2010 (the number is probably slightly better today in view of the rally in financial markets since last summer). So let’s give them the benefit of the doubt and call it only \$2 trillion.

But faced with historically low interest rates courtesy of the Federal Reserve’s zero interest rate policy, large pension funds from Pennsylvania to California are back investing in private equity funds. According to *Preqin*, which surveyed more than 100 private equity investors last month, more than 90 percent of investors plan to maintain or increase their private equity holdings over the next three to five years. More than half plan to increase their investments in 2011 over 2010. While the very top private equity firms can reasonably be expected to produce decent returns, even these returns will be nothing to write home about after being adjusted for leverage, liquidity, concentration risk and fees. In the meantime, the continued attraction of private equity speaks to the short memories



and desperation for returns that continue to push institutional investors into decisions that maintain the boom-and-bust structure of financial markets.

One of the biggest drawbacks of private equity investing is the egregious fees charged by private equity firms for their services. It appears that investors have made some progress in reducing these fees to saner levels, but they still remain exorbitant. It was recently reported that Kohlberg Kravis & Roberts, one of the premier private equity firms, was forced to reduce the fees it is charging on its latest fund by offering to either pass through 100 percent of the (ridiculous) monitoring and transaction fees it charges its portfolio companies to its investors in exchange for higher performance fees. Even if this is helpful to the investors in their funds, it does nothing for the lenders to these portfolio companies who are increasingly being asked to take less for the so-called privilege of participating in the continuing overleveraging of America. As noted above, the market is seeing the return of covenant-lite bank loans (loans that place few restrictions on borrowers) as well as lower interest rates and spreads, while junk bonds are being issued at lower yields as well.

Private equity returns are inextricably linked to the fortunes of the leveraged finance markets. While bank loans remain relatively attractive – particularly those not associated with leveraged buyouts – junk bonds have become overvalued. While junk bonds will likely continue to perform reasonably well through the course of 2011 due to an absence of defaults, investors are being poorly compensated for the risks they are assuming in purchasing what remain hybrid debt-equity instruments. Particularly in this Stuxnet economy, investors cannot afford to be complacent about credit quality. The private equity industry still has a great deal of unspent capital that it is trying to push out the door before it has to return it to investors. New funds are the last thing the industry or a still over-leveraged economy needs right now. With low interest rates and increasingly lax lending terms being made available to private equity firms, the conditions are in place for another private equity bubble to arise even before the remains of the last bubble have been cleaned up. Buyer beware.

### **The U.S. budget deficit**

The Congressional Budget Office recently reported that the fiscal 2012 federal budget deficit is projected to hit US\$1.5 trillion. In the face of this, the Obama administration has yet to endorse any specific recommendation of its bipartisan commission on deficit reduction. Mr. Obama's boldest plan is to freeze discretionary spending, which will reduce the future deficit by US\$400 billion. Many say that this proposal is a good start, and it is certainly the very least that should be done, but it is really just a chip shot both economically and politically. Unfortunately, Mr. Obama has also "unofficially" begun his 2012 re-election campaign, which suggests to *HCM* that little in the nature of bold proposals are likely to emerge from the White House for the duration of his first term.



There is increasing chatter about changing the income tax code and the need to reform entitlement spending before the global debt markets revolt, but it is only chatter. Both parties remain in the thrall of their most radical elements, which will prevent meaningful budget reform from occurring. The issue will come to a near-term head in March when the federal debt ceiling is breached and must be raised, which is in itself a farce since the so-called deficit figure excludes the trillions of dollars of GSE debt that the U.S. government has guaranteed. So raising the debt ceiling from US\$14.294 trillion when it is already over US\$19 trillion is a joke. These numbers are pure fictions drawn in the air by politicians who are brashly lying every time they open their mouths. The only force that will put an end to the farce of U.S. fiscal power is the markets, and the markets are a very harsh mistress once they show their charms.

Our friend Christopher Wood, who remains among the sharpest minds on the investment scene today, made a very interesting comment about the Chinese economy recently that triggered some thoughts about the American economy. Mr. Wood wrote that “monetary policy goes to the heart of political power in China in terms of the allocation of capital in the context of the command economy banking system.”<sup>6</sup> One of the most important issues in any economy, whether it be China’s or the United States’, is how capital is allocated. In a command economy like China’s, the political authorities are openly the economic authorities as well and direct capital to wherever they want it to go. In the United States, we are under the illusion that things are different. We ostensibly have a non-political central bank that is responsible for setting interest rates and maintaining financial stability<sup>7</sup>. And that central bank’s policies with respect to interest rates are hugely influential in determining where money will be allocated.

Today’s zero interest rate policy may not direct capital to specific investments, but the central bankers setting the rate know with certainty that capital bearing such low rates will end up in speculative ventures in an economy already suffering from excess capacity and governed by a set of rules that favor speculation over productive investment. The policy goal may not be as overtly stated as it is in China’s command economy, but the government in this so-called free market is playing an enormously influential role in capital allocation through the complex web of policies that govern the economy. Those policies are where the real power lies in the United States, which is why, for example, genuine financial reform has been blocked by large financial interests. China and the United States may be very different, but they are more alike than many people would like to think. And moving closer economically every day in too many ways to describe here.

## Iran

When I read about the Stuxnet virus that attacked the Iranian nuclear program, the first image that came to mind was the hirsute head of Mahmoud Ahmadinejad spinning wildly

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<sup>6</sup> Christopher Wood, *GREED & fear*, February 1, 2011, p. 2.

<sup>7</sup> Whatever that term means. It is probably best understood as Humpty Dumpty taught us when he said “When I use a word it means just what I choose it to mean – neither more nor less.”



out of control until it simply flew off into space (I know, I know...from my mouth to God's ears!). The apparent destruction from within of a large number of centrifuges at Iran's Natanz nuclear facility provided a welcome breather for the world to deal with the Iranian threat. None of us, I think, realized how important that breather was until the events in Egypt began to unfold. But now that the stability of the Middle East has been thrown into serious doubt, it is truly a Godsend that Iran's nuclear ambitions have been delayed by several years.

The Stuxnet virus is a fascinating creation and in certain respects a perfect symbol of the intellectual and ideological rot on which Iran's leadership is based. Fanaticism and hatred tend to spin out of control until they explode and destroy themselves, so what better way to disrupt Iran's nuclear ambitions than a cyber virus forces the computers that run its nuclear facilities to spin out of control until they destroy themselves? Even better, the virus tells the scientists in Iran's nuclear control rooms that the centrifuges are running normally, just as tyrants like to think their countries are operating normally under their rule. If the world is ultimately able to prevent Iran from gaining nuclear capability, Stuxnet will prove to have been a humiliating setback for the Iranian regime. Unfortunately, the Stuxnet cyber attack is just a small and temporary victory. And the three or possibly four years of delay it buys the West is just a drop of water in the ocean of Biblical time. Stuxnet does not eliminate Iran's nuclear ambitions.

Media reports in *The New York Times* and elsewhere strongly suggest that the cyber attacks on Iran's nuclear facilities were orchestrated by Israel with the backing of the United States. Reportedly, President George W. Bush authorized the program in 2009 and his successor Barack Obama accelerated it after he took office. One can only hope that these stories are true. There can be no doubt that that Israel will leave no stone unturned in its efforts to undermine Iran's nuclear program because it properly views Iran gaining nuclear weapons as an existential threat. As for the United States, one can only hope that it is strongly supporting these efforts behind the scenes while publicly pursuing diplomacy and sanctions.

This is no time for the U.S. to reduce the pressure on Iran even with the distraction of Egypt and other potential regime change in the Middle East; in fact, this is the time to step up activity to insure that Iran is prevented from regaining nuclear momentum. A nuclear Iran remains an unthinkable proposition for the West, just as a nuclear Iraq was deemed unacceptable in 1981 when Israel destroyed the Osirak nuclear facility before it became operative. Much of the world may have publicly condemned Israel for that action, but behind closed doors those same critics were breathing huge sighs of relief that Saddam Hussein was not going to have possession of nuclear weapons. The world today would look very different – and much more dangerous – if he had.



## Disclosure Appendix

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