GLOBAL MARKETS

A short paper on everything

About this economic recovery, four things strike. First, services ("intangibles") are ticking along nicely, but manufacturing is a disaster. Second, developed markets (DMs) are doing fine. Emerging markets (EMs) are dogs (Figure 1). This is because DMs are service-producing economies. EMs are mainly factory economies and/or commodity/energy producers. Third, international trade in things ("tangibles") is shrinking for the first time since the financial crisis (Figure 2 and Inset 1, page 8). Fourth, as the global stock of debt keeps rising as a proportion of GDP, its use is increasingly unproductive, especially in EMs.

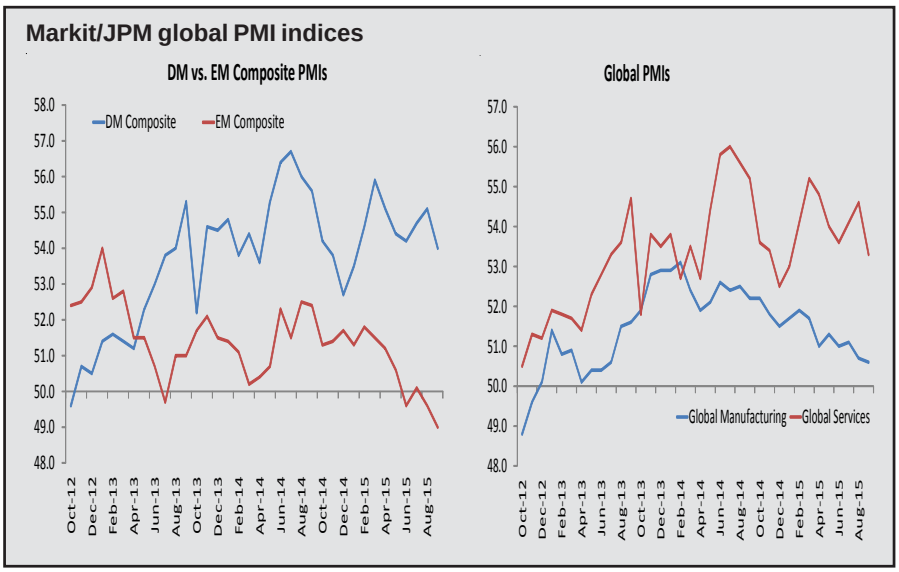

Figure 1. *Source: Markit/JP Morgan*

Figure 2. *Source: CPB World Trade Monitor*

Why these four things?

Services over manufacturing

If the world were made up only of services it would be having a fast, not a slow, recovery. The problem lies in the manufacturing sector that is lagging everywhere, nearly without exception.

Manufacturing could be weak for a number of reasons:

• Habits have shifted. People are consuming fewer tangible things (the virtualisation of an increasing swathe of consumer goods, phone apps replace cameras/nearly everything, Dropbox replaces paper and filing cabinets as well as secretaries!) This leaves a growing supply overhang that needs to be worked through or creatively destroyed.

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• The price of things people do consume is falling while the quality is improving. This is not adequately captured in measures of output despite the obvious benefits to end-users. It may explain how real living standards rise though wages hardly do. And why American workers poll that they are satisfied with their jobs, despite the on-going destruction of the middle class in terms of economic and social data.

Disruptive technologies

Underpinning this, and changing the way economies create wealth, are disruptive technologies. The power of disruptive technologies is when individual modules of technical innovation link together, like multi-headed locomotives driving trains of change. To name a few, this is happening with the synapses of:

Solar and battery storage are experiencing exponentially falling costs and efficiency gains. The two technologies combined make the energy-autonomous dwelling a reality (and not just in sun-soaked California). That will destroy the existing economics of electricity generation and distribution and create a new one in its place with homes being the major generator in a new smart grid. It also makes electricity virtually free of charge for a new wave of family electric cars.

Another technology train empowered by the synapse of separate innovative modules is made up of autonomous cars (buses, trucks et al); electric (or hydrogen-) powered vehicles and the economy of sharing (Uber etc). Obviously this changes car and fuel demand (27% of world oil consumption). But it doesn't stop there: a sea change sweeps through urban congestion, carbon pollution; the economics of distribution, car and road taxation; consumption of alternative products (what do you buy with the money previously tied up in your car?); the loss of oil leverage in global trade and geopolitics and the fate of (future failed) oil-producing states like Russia, along with a goodly slice of the Middle East.

Artificial intelligence (AI) will vastly reduce the cost of making things, as AI is cheaper than even the cheapest labour and unbelievably more productive. Unlike previous technological waves, it affects services as much as manufacturing — see our report *AI, un-humanlike intelligence and the economy*, 19 March 2014. It threatens 45% of DM jobs and deprives EMs of their major comparative advantage: cheap labour for manufactured products or low-cost commodities and energy.

How the AI supply-side gain is matched by demand is undecided, but crucial; making things for virtually nothing still needs people with earnings and assets to buy them. The income and wealth distribution effects of AI are a major political challenge. The AI impact on the current recovery is still gradual. It will become disruptive. But not yet.

The human cloud is already a significant example of the economy of sharing — but on the supply side. Here people do bespoke piecework online and gather ratings based on the quality of their output. It is an unmeasured source of job creation that transforms individuals into businesses, lowers the cost of production and increases the flexibility of labour markets (no minimum wage, nor work place regulation nor hiring and firing restrictions).

There are many other such technologies at work such as Big Data, shared (anonymised) medical data and diagnostics, the internet of things etc. But the common denominator is that they all destroy existing systems and replace them with new ones. They are all "intangibles". And whereas they will impact the production of things, their real value-added is derived from their intangible nature (Figure 3). At a guess, they will:

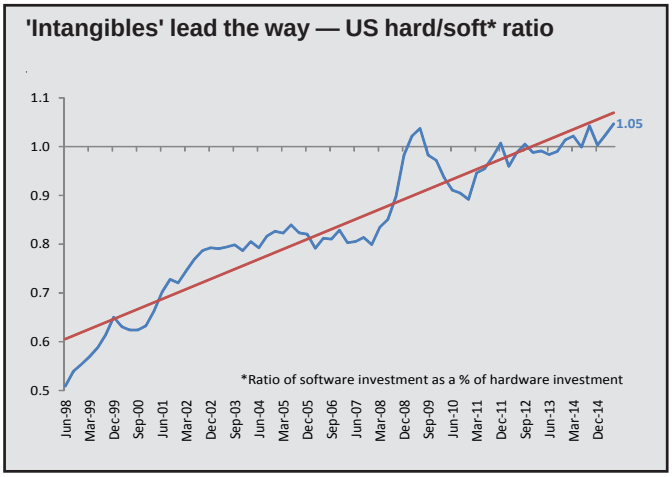

Figure 3. *Source: Independent Strategy*

- Increase living standards by lowering costs and improving quality. Even at stable income levels, living standards will rise.

- Make economic growth less dependent upon capital and raw material inputs. Weak gross fixed capital formation alongside booming R&D spending in the US highlights this shift.

- Disruptive technologies will improve the quality of life. A bigger slice of economic life will be intangible. That uses less material inputs (the major desecrators of the planet) and uses them more efficiently. As an example, if one-third of food production currently wasted globally were distributed efficiently, one-third of crop land could be returned to the wilderness for our children. And that's before counting the production gains per acre of crop land from advancing agricultural technology. Similarly, economic growth will need less steel, cement etc. (Figures 4 and 5).

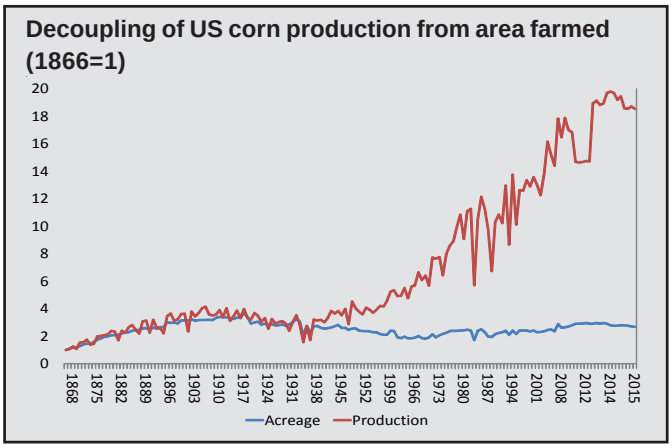

Figure 4. *Source: US Census Bureau (1975, 2012)*

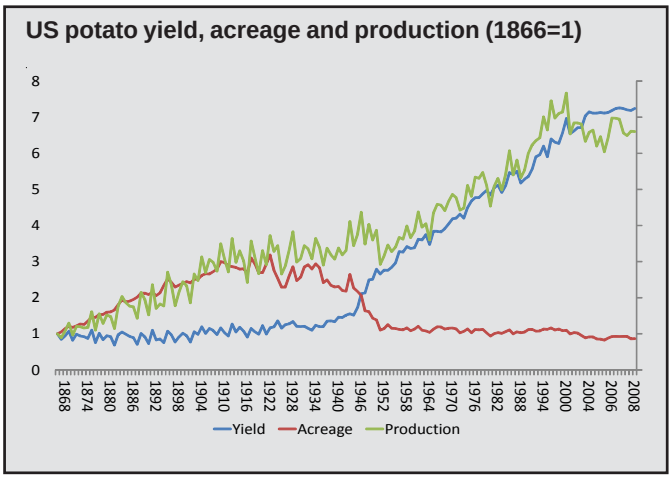

Figure 5 *Source: USDA (2013)*

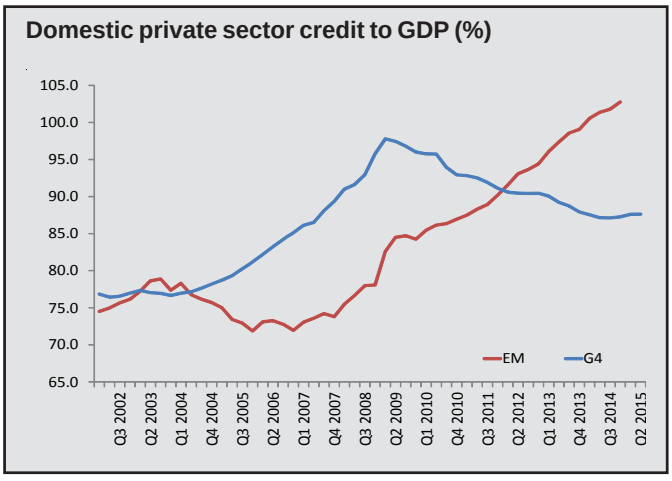

Figure 6. *Source: BIS, Independent Strategy*

- Increase inequality of wealth and income within and between economies.

- Work to the detriment of economies that are overly-focused on the production of things.

- Weaken the global comparative advantage of cheap labour.

- Change the inflation targeting of central banks, making old rules and objectives irrelevant.

Some unimaginable and unintended consequences

Emerging or submerging economies?

Let's synthesise the observation that right now the economy of things is languishing and the economy of non-things is booming with the plate-shifts of disruptive technologies and draw some selective conclusions.

EMs are either factory economies or commodity or energy producers ("old economy things"). EMs have got other issues too: falling productivity, over-leverage, ageing (having grown old before they got rich) and loss of competitiveness. All of the Asian EMs share several or all of these woes — especially the over-leverage problem (Figure 6).

EMs will suffer a secular decline in demand for their tangible exports. That means the EM development model (excess savings ploughed into exports of manufactured goods) is broken. How many EMs will successfully convert to domestic-led growth models powered by services and relying on new creative products with both a national and global reach? Have EMs the creativity to be competitive in the fast-growing global economy of 'non-things"? Their consumers are up there with the best (e.g. China mobile and internet demand or mobile phone banking in Africa), but what about the supply side of their economies?

Our guess is that China has the critical mass and the acceptance of technological change that will achieve this. So will Singapore. Korea could do so, but is culturally over-focused on the virtues of producing tangibles. Most central European economies are grouped as suppliers to the German manufacturing centre of global excellence (despite Volkswagen). We don't see Germany changing or losing its vocation. But most of Latin America, Middle East and Africa are losers. The potentially yawning gaps in living standards that this vision dictates could create more failed states in these parts of the world. In the European and Asian space, Russia could be another.

Central banks

There are some very inconsistent but intriguing scenarios for central banks (CBs).

If the debt mountain causes the global economy to collapse when monetary "normalisation" occurs, that would spell the end of the last vestiges of central bank independence. Lacking effective tools to spark another credit cycle, they would be transformed into direct lenders to fund investment in areas like broadband and road infrastructure, where there are real needs. Their massive holdings of government debt would simply get written off or transformed into zero-interest rate perpetuals to allow governments to deleverage. And of course policy interest rates would be highly negative and government bond yields would be low or negative.

Even if this doesn't happen and new technologies mean that 2% inflation is a relic, leaving nominal policy rates at around 1.0-1.5%, how does capital get allocated? The existing stock of unproductive debt would be costless in real terms and therefore remain as a deadweight on the economy. The economy of non-things requires far less capital than traditional growth. But savings would remain fairly high as people tend to save more to cope with old age and low yields. And liquidity would stay pumped-up as CB balance sheets would shrink little or not at all.

Does this stock of surplus savings result in a permanent deficiency of demand? Or do central banks take over as demand managers, depriving people of the right to hold tangible cash and forcing interest rates deep into negative territory to ensure savings get spent? Or is growth achieved in the intangible capital-lite economy by dint of new innovative products while the over-leveraged zombie economy survives on free credit? The sum of both would yield low growth, but relatively stable employment.

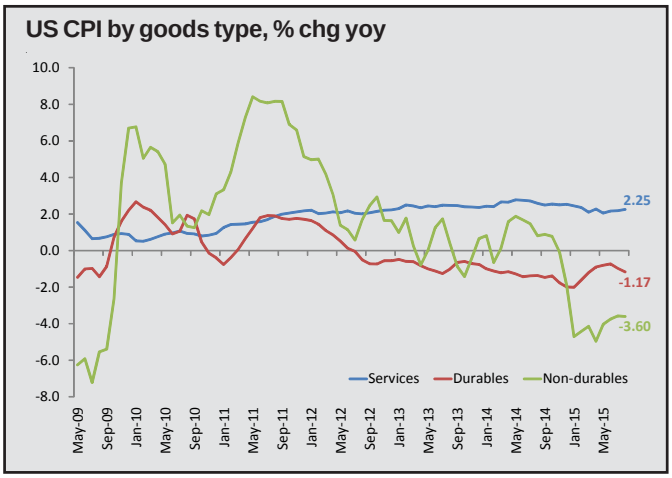

Figure 7. *Source: BLS, Independent Strategy*

But won't tightening labour markets rekindle wage growth? Perhaps not! The recovery in DMs is being driven by services paid for from monies gleaned from cheaper goods and import prices (Figure 7). Though low in growth, this recovery is high in absorption of labour slack. This is because most traditional services are 30-40% less productive than making things. That, in turn, means less growth and more jobs due to very poor productivity. Pay is poor (it should be, as productivity at this end is low). So wage inflation is absent. The Phillips curve is dead and NAIRU a relic? Perhaps.

Investment non-conclusion

It's tough to tell people how to make money out of a series of questions rather than answers about plateshifts that are chaotic, unpredictable and can't easily be timed. All of which makes them even more relevant for investors. But, at a guess, we'd say:

• 60-80% of the existing equity market caps are made up of dying ducks. The names of the new winners are probably unknown to us and illiquid to boot. But we better find them!

• DM long-term bond yields will probably peak out at 2.5%-3.0% in this cycle. CBs — starting with the Federal Reserve in December — will start to normalise rates. But as the global debt walls crack and plaster starts to fall, they will either reverse policy or promise to never to do it again or do it soooo slowly as not to matter! After all the central bankers know (but can't tell!) and we know, that with the global mountain of unproductive debt still piling up, any economically realistic costing of it is impossible.

• Most EM currencies are shot and are still screaming shorts. Measures of GDP growth during the aftermath of periods of excess credit, such as we see in Asian EMs today, indicate growth rates in the subsequent years of 2-4% respectively, for deleveraging 'with' and 'without' a debt crisis and recession. 90% of EMs will never make it beyond middle-income stagnation (at best). The number of EM failed states will rise beyond the obvious candidates to include at least another ten, mostly with contiguous borders to rich countries.

• Oil is in secular decline because demand is. Over-supply is a Saudi battle to be the last man (woman aren't allowed to) standing in a shrinking market.

• Industrial raw materials are for the birds.

• Food commodities depend on the harvest — purely cyclical investments.

Shrinking global trade

International trade: is it shrinking because of low commodity and energy prices or because volume is falling? Or is this only a partial explanation? If the latter, then the problem is one of shifting patterns of demand away from the economy of things towards services that will cause years of adjustment to the factory economies of Asia. The decline in global trade is a function of collapsing product values. Export volumes are still expanding, albeit slowly (Figure A).

World trade in exports, % chg yoy

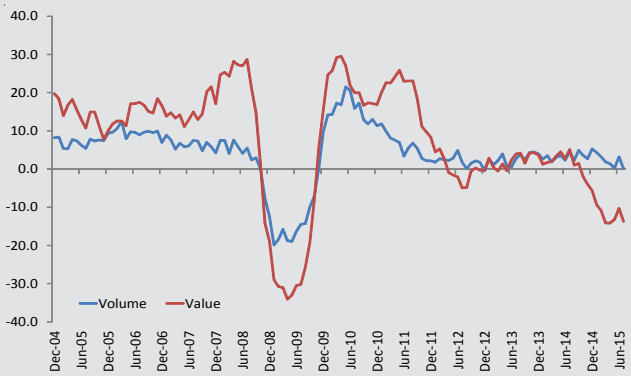

Figure A. *Source: CPB World Trade Monitor*

Part of this is commodity prices, clearly evident in the sharp decline in the value of sales in Latam, the Middle East and Eastern Europe (Russia). The effects of yen and euro devaluation can also be seen (Figure B).

Exports by region: volume versus value, % chg yoy

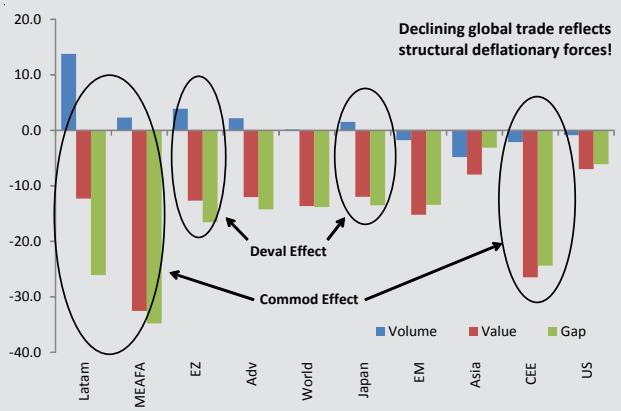

Figure B. *Source: CPB World Trade Monitor, Independent Strategy*

The same picture is visible in global industrial production where prices are also deflating fast (equally evident in PPI deflation). This effect has been propping up production volumes, but only just (Figure C).

Despite producing at lower prices, manufacturers continue to find tepid demand. In Asia, production is far outstripping export growth (Figure D). This suggests overcapacity is as much of a problem as weak demand. All of this hints that global deflationary pressures are only just beginning.

World industrial production, % chg yoy

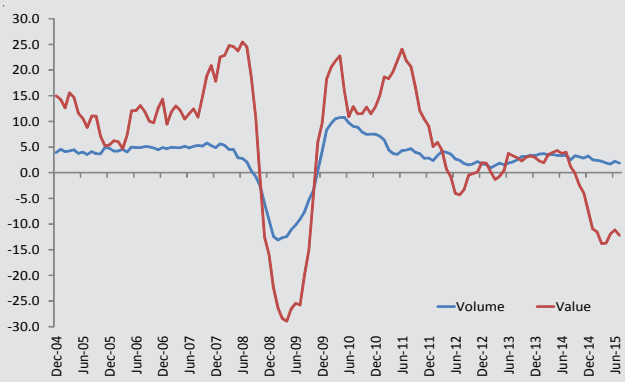

Figure C. *Source: Datastream*

World exports and IP (volume terms), % chg yoy

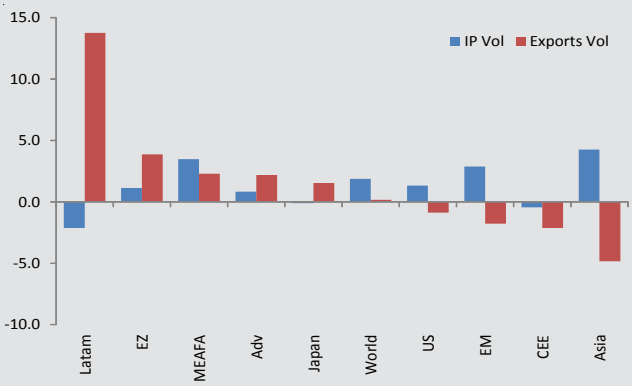

Figure D. *Source: CPB World Trade Monitor, Independent Strategy*

EMs will need to get good at services and work through the malinvestment and over-leverage against this backdrop of deflation and falling productivity and profitability. That's a painful task. The only palliative for Asian EMs would be printing money and letting their exchange rates go to get inflation up.

But this might be a fruitless strategy. As Japan has found, if structural deflationary forces are entrenched, dislodging them with a weaker exchange rate is hopeless. In fact, it risks undermining domestic demand as real incomes are eroded by higher import costs while exports fail to make up the lost ground because of brittle external demand and entrenched goods price deflation. Look at the oil market and see the cost of trying to protect market share in such an environment.

A more probable path would be to slash capex and cut debt. That is equally damaging to final demand in Asia, given how consumption has been driven by incomes sourced from the over-investment boom.

Inset 1. *Source: Independent Strategy*

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