



July 2016

Thinking outside the box

“Every economic problem can now be solved, but governments prevent the solutions from being implemented.”

Woody Brock

As a boy, my parents always told me I talked too much. “Think before you talk”, was my parents’ standard response, when I went into another tirade. Many moons later, those words continue to sit firmly in the back of my head. I have so much to say about Brexit, but I need to think before I talk.

Consequently, I have decided to publish a one-off mid-month Absolute Return Letter, covering the potential ramifications of Brexit and a few other thoughts related to the Brexit subject, and I can assure you that one or two of them will raise a few eyebrows. You should therefore do yourself a favour and read the Brexit letter, when it arrives in your inbox about ten days from now.

On a different note altogether, imagine sitting in one of the finer restaurants in Geneva with a prospective client and Woody Brock, your economic adviser. A waiter approaches your table and asks if anyone has any questions re the menu. Woody enquires about the chicken dish. “Oh, that is delicious”, the waiter says. “Most definitely one of my favourites”. “But is the chicken breast from a lesbian chicken?” Woody enquires. The poor waiter is gobsmacked and doesn’t know what to say. At first, the client and I are both convinced that Woody is just trying to wind up the waiter, but we quickly realise that he is dead serious. “Those chicken breasts are by far the juiciest, and you should know that”, Woody reprimands us, and for a while we feel like schoolchildren.

Now, many years after *the chicken night in Geneva*, as I still call it, I cannot remember how it all ended (that’s what happens when you are in stitches of laughter), apart from the fact that I learned a couple of important lessons that evening. I learned that economists come in many varieties, and that Woody is certainly one of the more colourful ones, and I learned that he is exceptionally good at thinking outside the box, which he has proven again and again over the many years that have since passed.

He proved it again as recently as three weeks ago, when he stopped by our offices in London, as he usually does, when he is in Europe. For those of you who don’t know him, he is probably best described as an *economist extraordinaire*. He is way past the point of trying to estimate how fast CPI is currently climbing, or whether

GDP is rising 1.25% or 1.5% this year. He lets the mere mortals deal with simple things like that. Woody's full and undiluted attention is instead on longer term topics that are likely to change the world in front of us. What I particularly like about him is that he is usually right for the right reasons. His observations and conclusions are so well researched that you rarely (if ever) catch him in skating on thin ice.

So, when he came to see us recently, I had high expectations, as I always do when Woody is in town. Having known him for many years, I have come to expect one or two surprises every time we meet, and he didn't disappoint me this time either. In fairness to Woody, he didn't use those exact words, but essentially he told us that the only solution to the ongoing global growth misery is helicopter money.

[Closing the loop on the June Absolute Return Letter](#)

Let me share his thinking with you but, before I do so, I want to make a point or two about last month's Absolute Return Letter. I received quite a lot of feedback on that letter (which is always greatly appreciated - thank you), and I have certainly been guilty of not responding to every single reader who wrote to me, but I hope you understand that I also have a day job to do.

The common denominator in the emails I received was something like this: "How can you be certain that ageing will lead to higher inflation? It hasn't done so in Japan". My English is obviously not as good as I thought it was, if that was the impression I left, but I thought I made it quite clear that this was a viewpoint expressed by the Bank for International Settlements ('BIS') and that, if BIS are proven correct, a lot of people - me included - could be taken by surprise in the years to come.

Another point raised, and a very valid one indeed, is how can one be sure that we are dealing with independent variables? How can one be sure that rising inflation in the 1970s and falling inflation since was caused by a change in the dependency ratio and not by wildly fluctuating oil prices? BIS obviously tested for this and claim that their results are robust but, as I haven't seen the test results, I can only take their word for it.

[It all began with declining inflation](#)

Back to the topic of this month's letter. Why does Woody think that the only solution is helicopter money? Before I answer that question, I need to provide a bit of background, and the story starts with the dramatic fall in inflation most of us have experienced since the early 1980s.

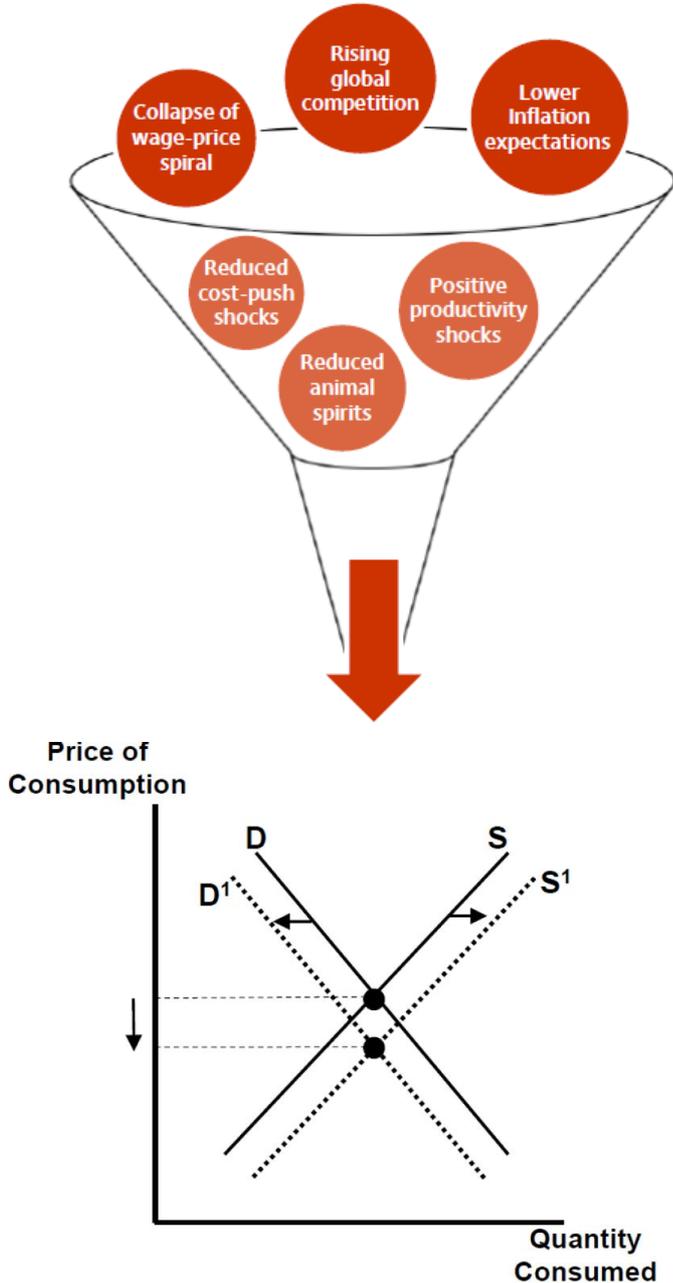
It started in earnest when Reagan and Thatcher broke the back of the unions. By doing that, they managed to break the wage-price spiral. Adding to that, a number of positive productivity shocks have made it possible to produce more at lower prices, and no productivity shock has been bigger than the .com revolution.

Global competition has intensified at the same time, adding further to overall pricing pressure and, in that context, no country has had a bigger impact on global pricing than China. At the same time, cost-push inflation has become less and less of an issue, and animal spirits took a knock, when the Global Financial Crisis turned almost the entire world upside down in 2008. As a result of all of the above, inflation expectations declined and, when they did, actual inflation also dropped.

Moreover, country specific factors also contributed. In the U.S., for example, a very strong dollar when measured on a trade-weighted basis, has added further downward pressure and, in Europe, the Eurozone crisis, which peaked in 2011-12, continues to do considerable damage to animal spirits. Meanwhile, in Japan, a very strong Yen hasn't exactly made it any easier for the Bank of Japan to create that little bit of inflation that is synonymous with a successful monetary policy programme. Most recently, the Brexit crisis hasn't exactly helped either.

A combination of all those factors (and more) has had the effect of pushing the demand curve to the left and the supply curve to the right (chart 1). Demand is no longer represented by D but by D¹ in chart 1, and supply is now S¹. The result? A declining inflation rate, which will ultimately lead to falling prices in absolute terms - i.e. outright deflation - if no action is taken.

Chart 1: Explaining a change in inflation



Source: Strategic Economic Decisions, Inc., June 2016

Why QE hasn't worked

Central bankers all over the western world are only too aware of this problem and thought QE could fix it, but it hasn't worked quite as intended. In fact, far from it. There were plenty of people who thought QE would turn the U.S. and Europe into another Zimbabwe, but those people don't look too smart today, and the obvious reason is that QE has nothing whatsoever to do with helicopter money.

Central banks have two major assets on their balance sheets – cash (coins and notes in circulation) and free reserves. QE has boosted free reserves, but has had no

impact at all on coins and notes in circulation, and it is only a rise in cash (i.e. helicopter money) that is inflationary; an increase in free reserves is not. Whereas many expected the rise in M2 caused by QE to be highly correlated with CPI, exactly the opposite has happened (chart 2).

Chart 2: The correlation between money supply and inflation

Correlations 1991 to 2015			
	CPI	Fed Funds	M2
CPI	1.00	0.45	-0.38
Fed Funds		1.00	-0.14
M2			1.00

Source: Strategic Economic Decisions, Inc., June 2016

The ultimate consequence of declining inflation

As inflation continues to decline, the impact on Δ GDP will become increasingly meaningful. Going back to chart 1, GDP in fact equals $P \times Q$ (price times quantity), so a declining ΔP will also lead to a declining Δ GDP. Hence the ultimate implication of an ever lower inflation rate is falling output. Another way of phrasing it is that, in a world where the S-curve shifts out faster than D-curve, Δ GDP will decline and ultimately turn negative.

You may argue that such an outcome wouldn't really matter, as the world as we know it would continue. The rest is only statistical abbreviations, and there is some truth to that (more on this below), but it *does* really matter that we enjoy some decent economic growth, inflation (as long as it is benign), and interest rates that are not extreme. In that respect, negative interest rates do a great deal more damage than high interest rates do and, if you don't believe me, I suggest you call your life insurer or your pension fund and ask them.

Why Woody is likely to be spot on (again)

Years ago, when Woody first began to make the point that we should all reduce our return expectations in the years to come, he was almost alone, but he no longer is. McKinsey Global Institute published a report only a few weeks ago called *Diminishing Returns: Why investors may need to lower their expectations*, which is most definitely worth half an hour of your time. Others are also singing from the same hymn sheet now, although it still appears to be a minority view.

Allow me to share a few of McKinsey's numbers with you. In the last half century (1965-2014), global GDP grew by 3.6% annually, U.S. GDP grew by 2.9% and GDP in Western Europe by 2.2%. Of that growth, 48% was accounted for by a growing workforce, and 52% by improved productivity (those numbers are based on G20 statistics).

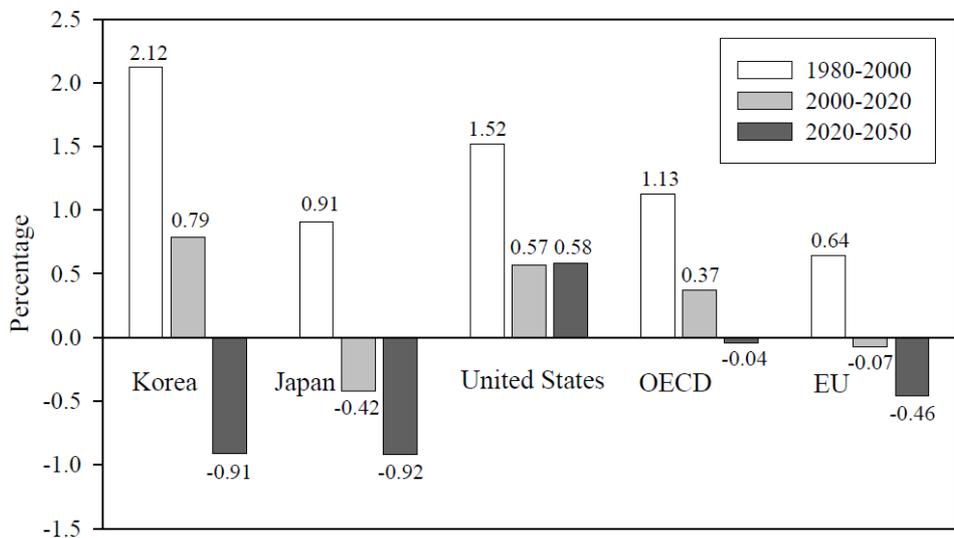
The extraordinarily robust returns that we have all enjoyed in the last 30-35 years, were a function of exceedingly good investment conditions:

- 1) Strong economic growth driven by a growing workforce.
- 2) Increased corporate profitability driven by rising productivity.
- 3) An exceptional drop in the cost of capital driven by the fall in interest rates.
- 4) An increase in equity valuations (P/E ratios) driven by a combination of all of the above.

Now, fast forward to today's environment. The workforce is beginning to shrink in many DM countries (chart 3), productivity is low everywhere – and unlikely to rise anytime soon as ageing has a negative effect on productivity - and interest rates cannot fall much further. In other words, only one of the four factors could conceivably drive equity returns meaningfully higher, and that would be a

continued rise in equity valuations, and why should P/E ratios rise if GDP growth is falling, if corporate profitability is under pressure, and the support from falling interest rates is (largely) behind us?

Chart 3: Annual average workforce growth during various periods



Source: Phang, Korea Labour Institute, OECD, KNSO, 2011

In my desperate search for reasons why equities could still be a reasonably good place to invest, my no. 1 reason would be the extraordinarily low interest rates (assuming they stay low). When rates are *that* low, at least part of the risk capital that, under normal circumstances, would be earmarked for credit, could now find its way into equities instead. I am not at all convinced equities will deliver outstanding returns as a result, but I wouldn't be surprised if they do better than many would expect them to, considering the very bleak environment outlined above.

[The link between productivity and living standards](#)

Going back to a formula I have shared with you many times before, ΔGDP equals $\Delta\text{Workforce}$ plus $\Delta\text{Productivity}$. Re-arranging that formula, the following holds true:

$$\Delta\text{Productivity} = \Delta\text{GDP} - \Delta\text{Workforce}$$

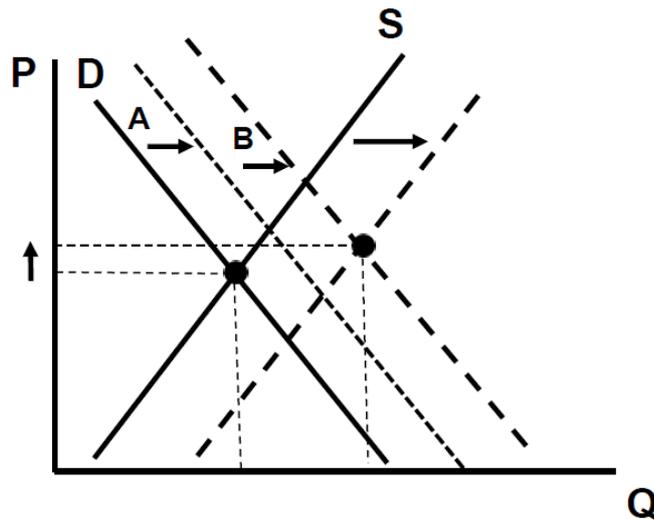
Economists often consider $\Delta\text{Productivity}$ akin to the growth in living standards, but what if the true rise in living standards is independent of the official data? What if the true rise in living standards is in fact much higher than the numbers suggest? You can argue that many of the gimmicks available to mankind today are in fact no more than mere gimmicks. My own pet hate is probably the selfie culture brought on by the smart phone. Having said that, my own living standards have certainly improved with the ability to send text messages on my mobile phone at virtually no cost.

Woody didn't say so (at least not in that many words) when he was here, but I wouldn't be at all surprised if the end result of the low-inflation, low-growth environment that we are currently in, is a complete re-configuration of economic statistics, designed to give animal spirits a much needed lift.

[Bring in the helicopters](#)

Going back to chart 1 one last time, what helicopter money is really all about is to ensure that the D-curve shifts *out*, and that it shifts out faster than the S-curve. Monetary authorities will have to print enough money to push the D-curve out to a point, where ΔP rises at a reasonable rate (B in chart 4).

Chart 4: Helicopter money's impact on demand



Source: *Strategic Economic Decisions, Inc., June 2016*

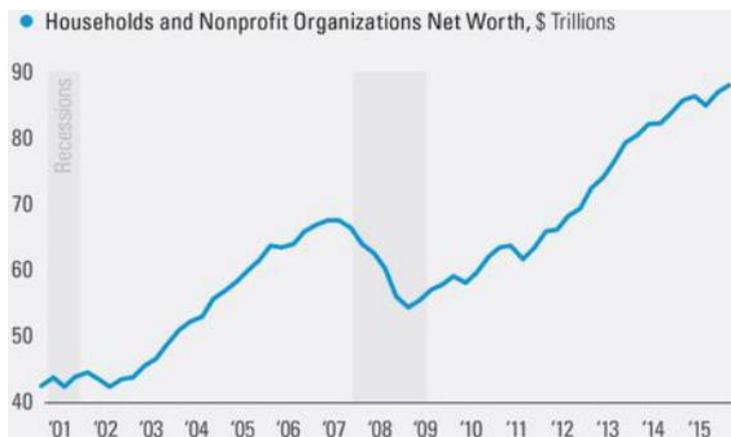
Now, before you accuse Woody (and me) of having lost it completely, don't think of it as Zimbabwe-style money printing, which was clearly a recipe for disaster. Think of it as a money printing exercise controlled by the Treasury Department. Give all households up and down the land a tax credit worth a few thousand pounds, for (say) three years running, and then sit back and evaluate the impact it has had on the overall economy.

Granted, not every single household in the country will spend every penny, as some will use it to service existing debt. That will hold back economic growth in the short term, but it will improve households' balance sheets and hence have a positive impact on spending longer term. That said, Woody thinks a remarkably high percentage of consumers will spend the money relatively quickly, as well over 90% of consumers lead a life style where virtually all household income is spent every month.

Wealth-to-GDP

On a somewhat related subject, I note that the Fed has just published the financial accounts of the United States for the first quarter of 2016. As at 31 March, 2016, total household net worth is now estimated to be \$88,087 billion (chart 5). That number should be assessed in the context of \$18,558 of U.S. GDP in 2015. In other words, U.S. wealth-to-GDP is now a whopping 4.75 times.

Chart 5: Total net worth in U.S. households



Source: *LPL Research, June 2016*

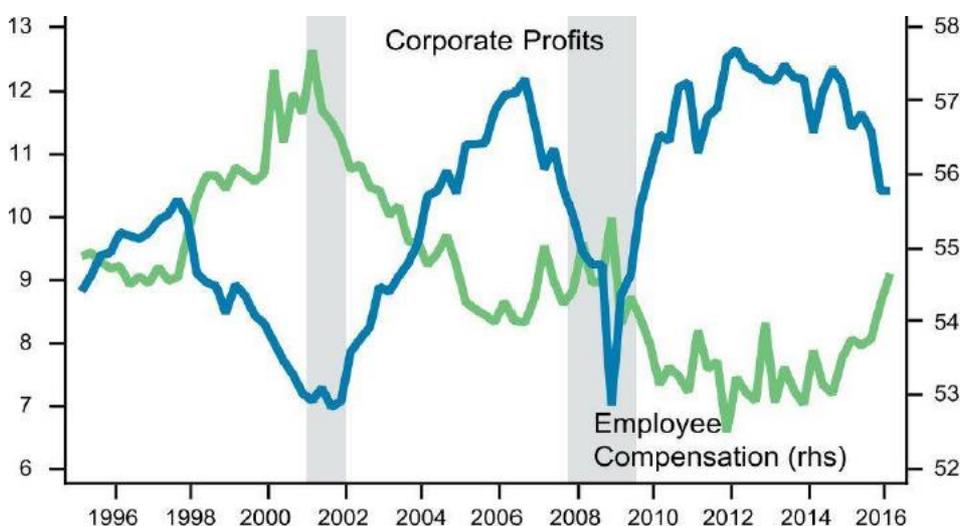
I have said it before, and I will say it again. In the long run, wealth-to-GDP is a relatively stable number and has averaged about 3.8 times in the U.S. over the last 100 or so years (the average being somewhat higher in Europe). In order to understand how it all works, one needs to understand a little bit about economic theory. In the national accounts, national income is divided between capital and labour. Labour is mostly wages, whereas capital is made up of many different items, such as interest, rent, dividends, profits, etc.

In the long run, the split between labour and capital is nearly constant. That has to do with economic growth theory, and the underlying reason is that the production function that drives the relationship between capital and labour is a so-called Cobb-Douglas function¹. As total net worth is very much a function of how national income is shared between capital and labour (the bigger share of national income that goes to capital, the faster net worth rises), it follows that net worth is largely driven by the split of national income between capital and labour.

Consequently, if we know that capital's share of national income will have to come down in the years to come (and we do), we also know that net worth-to-GDP will have to fall. What we don't know is *when* this will happen and *how fast* it will happen. I mention it in the context of this month's Absolute Return Letter only because slow economic growth in the years to come could quite possibly be the catalyst that make it all happen.

Besides, I have noticed that U.S. wages have begun to rise again when measured as a % of GDP, following a 15-year slump, causing corporate profits to be squeezed (chart 6). This will obviously impact the split between capital and labour in the national accounts, so perhaps the long awaited mean reversion has already begun?

Chart 6: U.S. profit and labour shares (% of GDP)



Source: *The Daily Shot*, BEA, Macrobond, BNP Paris, June 2016

A full reversion to the long term mean of 3.8 times would imply a drop in net worth of approx. \$20 trillion (assuming a GDP of around current numbers), so it is not exactly pocket money we are talking about. In that context I note that total net worth in the U.S. troughed at \$56,214 billion in December 2008 at the bottom of the financial crisis – some \$30 trillion below current net worth.

¹ In economics, the Cobb-Douglas production function is a particular form of the production function, widely used to represent the technological relationship between the amounts of inputs, usually capital and labour, and the amount of output that can be produced by those inputs.

Conclusion

Regular readers of the Absolute Return Letter may be confused at this stage. Only last month did I make the point that ageing could actually be (modestly) inflationary, whereas I now suggest that disinflation or even deflation is almost set in stone for years to come. Could I do everyone a favour and make up my mind?

Your point is well taken but, as I already have pointed out, the argument that ageing could quite possibly be inflationary was not mine but that of BIS, and the observations in this month's letter are (largely) those of Woody Brock.

That said, Woody deliberately kept ageing out of his 'funnel chart' (the top half of chart 1 above). As he pointed out when in London, ageing has only had a modest impact on GDP growth and inflation so far. Governments have ruined economic growth in Europe; demographics haven't. If employment laws are such that employment is virtually for life, companies stop hiring. If you can't fire, you don't hire, as Woody pointed out.

Back to the question - is BIS correct or does Woody have a point? In the past, I have always been in Woody's camp, but will openly admit that BIS' evidence was quite compelling. To me, the weakest part of BIS' argument is the recent performance of inflation in Japan. Being the oldest country in the world, if ageing is actually inflationary, why is inflation so subdued in Japan? BIS doesn't provide a proper answer to that question so, until they do, I will continue to lean towards the argument that inflation will remain modest for many years to come.

Niels C. Jensen
1 July 2016

Important Notice

This material has been prepared by Absolute Return Partners LLP (**ARP**). ARP is authorised and regulated by the Financial Conduct Authority in the United Kingdom. It is provided for information purposes, is intended for your use only and does not constitute an invitation or offer to subscribe for or purchase any of the products or services mentioned. The information provided is not intended to provide a sufficient basis on which to make an investment decision. Information and opinions presented in this material have been obtained or derived from sources believed by ARP to be reliable, but ARP makes no representation as to their accuracy or completeness. ARP accepts no liability for any loss arising from the use of this material. The results referred to in this document are not a guide to the future performance of ARP. The value of investments can go down as well as up and the implementation of the approach described does not guarantee positive performance. Any reference to potential asset allocation and potential returns do not represent and should not be interpreted as projections.

Absolute Return Partners

Absolute Return Partners LLP is a London based client-driven, alternative investment boutique. We provide independent asset management and investment advisory services globally to institutional investors.

We are a company with a simple mission – delivering superior risk-adjusted returns to our clients. We believe that we can achieve this through a disciplined risk management approach and an investment process based on our open architecture platform.

Our focus is strictly on absolute returns and our thinking, product development, asset allocation and portfolio construction are all driven by a series of long-term macro themes, some of which we express in the Absolute Return Letter.

We have eliminated all conflicts of interest with our transparent business model and we offer flexible solutions, tailored to match specific needs.

We are authorised and regulated by the Financial Conduct Authority in the UK.

Visit www.arpinvestments.com to learn more about us.

Absolute Return Letter contributors:

Niels C. Jensen	nj@arpinvestments.com	Tel +44 20 8939 2901
Gerard Ifill-Williams	giw@arpinvestments.com	Tel +44 20 8939 2902
Nick Rees	nr@arpinvestments.com	Tel +44 20 8939 2903
Tricia Ward	tw@arpinvestments.com	Tel +44 20 8939 2906
Alison Major Lépine	aml@arpinvestments.com	Tel: +44 20 8939 2910