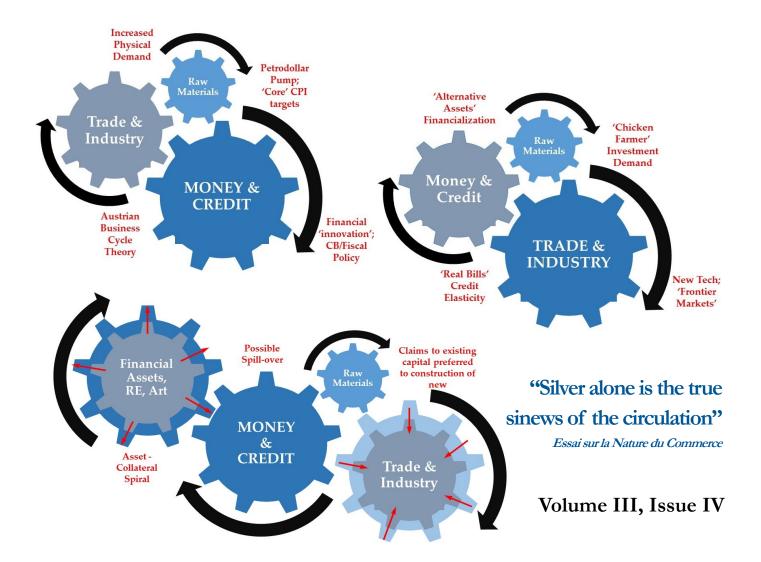
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Consuming Folly

How prices and capital unite producers and consumers

In my latest, two-part podcast, I made good a promise to give a detailed consideration to the issue of whether there was such a thing as a 'Consumer', taken in isolation and whether a person's role as producer was not more important instead. I looked at the part played by prices, interest rates and capital and the incentives offered and signals given by them to both savers and entrepreneurs. I argued that worship of that False God-the 'Consumer' - not only slows economic progress in general or encourages heavy-handed and often harmful policies of intervention, but also that it leads directly to the wastefulness of Boom and Bust. Here follows a transcript of what can also be heard as Part II via CantillonCH at SoundCloud, or via Apple Podcasts here as part of the series entitled, 'Cantillon Effects'.

Consuming Folly

In our last offering we noted that Jim O'Neill had opined on CNBC that the 'single most important thing in the world economy is the Chinese consumer slowing down' while that well-known American opinionator, Josh Brown, had been pushing a chart purporting to show that it was the American one who was still Top Dog, accounting for, as he put it, one-sixth of world GDP.

Slightly more sophisticated, but equally awry, we also had Gavekal weighing in on the manner in which misjudged monetary policy has 'brought forward' too much of that same consumer spending and how it would eventually lead to a major correction.

Like many examples of both common parlance and the use of technical buzz-words, there is a glimmer of truth to all these pronouncements – a matter we briefly discussed in that earlier episode. Here we would like to take the time to show why they are so profoundly misleading in their conception and why that makes them so conducive both to bad economic reasoning and ill-directed intervention.

To start from the very beginning, this whole idea of 'The Consumer' is little more than the truism that, for as long as we human animals experience both needs and desires, we will consume - sometimes voluntarily less but usually willingly more - whatever it is that fulfils these twin urges. The real issue then is what determines what things are available to consume and how do people come by the means with which to acquire them, once they have been called into being.

The answer, it should be no surprise to learn, is production, taken in the broadest possible sense. This

stretches from the simple investment of time and labour involved in basic hunting and gathering all the way up to writing the software with which to program microchips in order to control the robots used to make machines to fabricate... well, you get the point.

Having thankfully moved long past the stage of grubbing in our own poor patch of dirt all the livelong day so as to provide clothing, shelter, and sustenance all by ourselves, when we engage in production, what we civilized types now generally do is concentrate on providing some small input to the great, inter-connected network of our fellows which we call a 'market'.

In other words, we act primarily as Producers in order that we can subsequently swap our contribution to the pot - usually in a very indirect manner and at some great remove from their final employment - for a wider combination of others' similarly productive efforts. On the assumption that such things are not acquired in order to aid further production on our part, but rather to meet to our personal needs, that is the point at which we can afford ourselves the option of becoming 'consumers'.

With this in mind, we now face a twofold question which is as easy to formulate as it is has proven difficult to resolve, despite the countless Five-year Plans, seizures of the 'Commanding Heights', and implementations of 'industrial strategy' the governing classes and their planners have attempted to carry out.

The twin-armed crux is this: how do we signal to one other what it is - out of a seeming infinity of possible choices - that we and others do want -i.e., what we and they should like both to sell and to buy- and how are we all going to bridge the ineluc-

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table passage of time while all this making, moving, and marketing comes to fruition?

The answer is that the first comes about as a function of the market prices of things. The mechanism therefore runs most smoothly when these prices are least distorted by the apparatus of the state - whether through the imposition of taxes and tariffs, permits and prohibitions, or through good, old-fashioned monetary manipulation.

The second requirement is met when we introduce the concept of capital, both of what is usually referred to as the 'fixed' kind - the sort will be of repeated use during a good number of consecutive acts of production - or the 'circulating' kind - the one-off component of a single productive round which may need to pass through many hands and travel many hundreds of miles, undergoing much modification and recombination before it fulfils its intended role.

As a brief, but necessary aside, we must here emphasize that it is the role played by such items (by such 'factors' in EcoSpeak) which is the decisive feature which qualifies them as constituting 'capital', not their physical form. Never forget that a given barrel of oil can be burnt in taking us to the beach for a holiday weekend or chemically modified as part of the technically-involved process of making a carbon-composite component of an aircraft wing. It is therefore the intended purpose, not the thing itself which matters.

Gone fishin'

Whatever their composition, the creation (as well as the later maintenance) of both these kinds of capital clearly requires that we forego some portion of what we might call 'hedonic', pleasurable - or perhaps, to get very Aristotelian, 'eudaimonic', satisfying - end-use consumption and instead work (or pay others to work on our behalf) to give form to them.

After all, even our lowly hunter-gatherer cannot be roasting a rabbit over the camp fire at the same time as he is knapping the flint needed for the heads of the arrows with which he will bag the poor beast's successor as supper (nor, incidentally while he is

acquiring the dexterity with to chip the stone or even while he is practising his aim with his bow, i.e., while he is adding to what we now call his 'human capital').

Production therefore necessarily involves time and since the price of time - or, perhaps, better yet, the price of time*liness* - is none other than the rate of interest, it is also vitally important that this, too, is formed naturally by a fine-grained, emergent, organic process from the actions of a multitude of buyers and sellers of future, as well as of present, goods.

Those buyers of future goods we call 'investors' or 'savers' and the price they pay to acquire them is, at root, the surrender of the present goods whose enjoyment they voluntarily agree to forego for the contractual term of their loan. The most creative and useful sellers of future goods are the entrepreneurs who take the other side of this exchange. The aim of such entrepreneurs is to parlay a binding promise of a deferred sale into the means of acquiring the extant resources over which the current, partly future-oriented owners are willing to cede their command.

They do this, of course, so they can build their plant, install their machinery, hire and pay their workers' upkeep; acquire raw materials and components in order to transpose, transform, and transport them - and all this without having to accumulate the required reserves in isolation; without being limited by their own limited capacity to garner a sufficiently large, employable surplus. In a reasonably descriptive phrase which has sadly since fallen into disuse, many economists used to refer to this as the 'wage' or 'subsistence' fund: that is, the arsenal needed to tide them over from first feeding the first inputs into the assembly line until the gratifying ring of the cash register sounds at the end.

To those enthused by the current vogue for 'crowdfunding' - that pooling of voluntary savings which aims to help some promising new business get underway - we would point out that what we have just described shows that all that is new about this practice are a few technical and legal details, but that the concept is as old as commerce itself. We might also note that since savers give up today's

use of their property in the hope of receiving a richer, replacement basket some time hence (an enhancement of value which it is the entrepreneurs' aim to realise), what this trade involves is the exchange of present for future goods. Thus, that part of the ratio between the prices of the two which compensates the saver for the passage of time (as opposed to that which offsets the various ancillary risks in which he is involved) is logically equivalent to - and hence naturally determines - the underlying interest rate applicable to the transaction, what we early defined as the price of timeliness.

I've been a Wild Rover

Alongside such enterprising types who are borrowing only to enable the creation and delivery of what they hope will be more highly valued goods and services, in practice there will of course be a very different species of debtor or obligor whose 'hedonic' need today surpasses what the fruits of their own prior productive contribution will allow them contemporaneously to pay for.

It is these and only such as these who can be therefore said to be 'bringing consumption forward' since they must reckon with being able to do less of it when their loan finally comes due for repayment. But even here it is key not to forget that, on the other side of this same bargain, their creditors' delayed recompense means that, in the round, these latter will enjoy an equal-and-opposite *increase* in their spending power, come the day of reckoning.

Debt payments, then, whether those constituting the return of principal or interest, are not - despite what so much trite commentary about their workings seems to imply - therefore a drain on the system as a whole, but rather a *transfer* mechanism. Interest is no less a charge for services rendered – our acquisition of 'timeliness' - than is a taxi fare or a lawyer's fee, as unwelcome as either of these may also be to meet when demanded of us.

In turn, this means that, at the aggregate level where they are usually expressed, many of the worries about the magnitude of what we might categorize as productively 'barren' debts are misplaced and that any malign influence being exerted by them must come about in more subtle, secondary,

and largely compositional ways. The Devil, as ever, is in the details, not the dead weight of data bundled indiscriminately together in most macroeconomic abecedaria.

Many a Time and Oft upon the Rialto

Always bear in mind that, had his contract been more conventionally drawn up, when his argosies foundered, Antonio's temporary hardship would only have been Shylock's momentary enrichment. Though perhaps the former's tailor would have been subject to a certain disappointment when the news of the shipwreck broke, the latter's wine-seller would have been rubbing his hands in glee. And – who knows – the lucky vintner might even have treated himself to a new doublet in our good Merchant's stead, so keeping the couturier satisfied, after all.

Moreover, assuming this unfruitful kind of consumption were only to constitute a modest fraction of total borrowing, it may be that those Mr. Micawbers indulging in it will become so much materially better off over the duration of their loan (as an admittedly fortunate by-product of the combined efforts of both their more thrifty and their more enterprising peers) that they will not much notice the potential shortfall when at last it arises.

Sometimes, after all, things DO just 'turn up'!

However - and here is the key point which eludes the mainstream - if this latter type of borrower comes to dominate the market, it inevitably means there will less saving being undertaken in proportionate - and possibly in absolute - terms. In an unhindered market for timeliness, this shift in supply versus demand would inevitably cause interest rates to rise to the point that only the entrepreneurs who were the most confident that their efforts could add the greatest increment of value could justify still bidding for a share of whatever diminished pool of funds were therefore left over for their use.

Put another way, only those projects deemed able to surmount the highest 'hurdle rates' would be initiated. As a result, the attempt to provide greater quantities of future goods would be naturally regulated by the greater hedonic urge to consume more present ones - a state we, in the jargon, call 'having a higher time preference'.

Thus, the bogeyman of a society's debt-enabled, exhaustive spending being a blight which will inevitably condemn it to vast over-capacity would be seen to be a phantom since the interest rate, by correctly signalling a heightened scarcity of capital (and, its causative flip-side, a diminished predisposition to save) would not ever allow such a body of inherently foredoomed capacity to be laid down in anticipation of a market which could not possibly then materialise.

Yes, this is a world destined to be a poorer place than it might have been since there will have been less capital formation and, yes again, the moment of future settlement will be revealed as the culmination of what has been little more than a zero-sum game between debtors and creditors - with all the associated societal strains *that* entails - than if the loans had been extended for successfully productive purposes.

But, conversely, thanks to the natural rise in interest rates which such conditions would freely entrain, no great dislocation of aims; no wholesale deception about the extent of available resources; no farreaching incoherence in plans and prognoses would result and so no looming economic earthquake need be feared.

I See No Signal

However, if we interfere with the clearing price of timeliness through monetary manipulation such that it diverges from that dictated by the balance of people's innate proclivities and, worse, if we press our finger down so firmly on the scales that everyone - both Entrepreneurs AND Exhausters, alike - wants to spend and no-one feels sufficiently incentivised to save, all of this self-governed compatibility is put in jeopardy and may even utterly disappear.

In this instance, those 'bringing consumption forward' are like a group of prodigal, self-indulgent farmers who are happily eating their seed-corn. But now, compounding their short-sightedness, the artificially capped - or even lowered - interest rate

which has tempted these *consumers* into improvidence will simultaneously spur *producers* to act on the fatal misapprehension that the current boom will endure and that more fields should therefore be cleared, tilled, sown, and harvested as a result of this brief upsurge in grain guzzling.

Thus, deprived of clear interest-rate signals about the building scarcity to which all that excess consumption is tending, they will imagine instead that a great opportunity exists in borrowing cheaply to make additional agricultural machinery, to mine more potash, and to construct more grain silos. Sadly, the looming dearth of seed to plant actually means that, if anything, there will be less, not more, demand for all such equipment and materials in the days to come.

To change the metaphor, the degraded information - the scrambled 'intertemporal' settings – are broadly analogous to the situation of a man who has long been working to lay down a new clipper for his shipping line only to find that there has meanwhile been a run on sail-cloth caused by everyone having treated themselves - on wondrously cheap credit - to a garden hammock in which idly to swing away the daylight hours.

To his horror, he discovers that this prevents him from fully fitting out his vessel either as cheaply as he had planned or to the same tight schedule and so threatens his ruin via the exhaustion of his capital fund. Worse, even if he does finally succeed in securing an emergency infusion to complete the task (possibly at the sort of penal, short-term lending rate which 'inverts the yield curve'), he is likely to find that none of our back-yard layabouts any longer possesses the wherewithal to pay him for passage aboard the craft when it belatedly arrives to stand at the dockside, paint gleaming and rigging freshly tarred, all ready for their custom.

With these two examples in mind, we can perhaps now see that this notion of 'bringing consumption forward' is no more than a fashionable modern euphemism for the traditional economic sin of 'consuming one's capital'.

Beyond even this, the overabundance of capital means (i.e., of apparently limitless cheap finance) as

opposed to a genuine increase in capital *per se* (that is to say, in saved and re-purposed real resources) will not just encourage established and heretofore profitable businesses to expand more than is advisable, but will trigger a spree of highly speculative start-ups - of Mississippi and South Sea 'projects', of canal and railway booms, *Grunderzeiten*, Tech and Telecom bubbles and other such outpourings of mass, speculative over-enthusiasm.

There is, of course, nothing wrong with people trusting their own capital to even the most harebrained or long-odds venture, nor anything necessarily dishonest about those undertaking it. *We* may judge both to be foolish, but it is not for us to impose our scales of preference on others.

Doubtless, too, some of those long shots come in and shower incredible riches on their backers as well as, by implication, material improvements on us, the customers whose new-found appetite will be what underpins their success.

What is a clear evil, however, is when interest rates are forced so low - and thus price and intertemporal signals are so swamped in static - that any chancer can have a crack at making it big, or at least of being able to sell out at a fancy price to some Greater Fools before it all goes, "POOF!"

In such circumstances, we can extend the parable above to see ourselves being encouraged to gorge once more on our seed-corn, but this time to the accompaniment of a financial industry shovelling money, the bulk of it conjured up out of the aether, hand over fist to any and every fast-talking gambler who wants a shot at farming exotic and nutritionally-untried crops, using untested methods of agriculture on previously barren land planted out of season. If we do this - as arguably we currently are doing with our crop of 'Unicorns'; our companies 'for carrying out an undertaking of great advantage, but nobody to know what it is' - is it any wonder if we all end up tired, broke, and hungry come harvest time?

In light of the foregoing, it should not be too great a leap to see why we Austrians blame the very existence of the Boom-Bust cycle on our flawed financial institutions - and *a fortiori* on the commercial banking cartel's chief enabler, the central bank - for their

role in suppressing the interest rate; for creating the illusion that more capital exists than is the really the case; and for fooling people into thinking they can both have their cake and eat it by monetising (i.e., by making instantly expendable) evidences of debt which would otherwise show that the lender had suspended his ability to purchase until his debtor had discharged his obligations and so freed up his claim on real resources, once again.

It is also why you will often hear us engage in what some dismiss as mere Old Testament moralising by saying that the more prolonged and pervasive the artificial Boom to which such actions give rise, the more likely the severity of the ensuing Bust. In reality, all we are suggesting is that it will take more time and effort to replace or redeploy scarce capital, the more it has been misallocated (we say, 'malinvested'). When we argue, in addition, that the more profuse and extensive the thicket of unfulfillable contracts and unrealized aspirations which we have caused to grow across our path, the greater will be our difficulty in disentangling ourselves from its thorns and grasping tendrils, we are not therefore making a normative judgement, but a coolly practical one instead.

In Corpore Sano

It should by now be apparent that a healthy, well-functioning version of that material, co-operative, multicellular organism which we refer to as the 'economy' requires both a dense and vibrant traffic of information and also the operation of reliable and timely feedbacks in order to prevent the build-up of either wasteful excess or eminently avoidable scarcity.

The nerve impulses and hormonal flows of our economic organism are generated by prices: the feedbacks by the incidence of profits and losses. In the latter case, profits signal the degree to which certain specific demands have not been fully sated, while the import of losses is that either the hunger itself has passed or else that the dish offered up has required too much lengthy preparation and far too many ingredients, both of which inputs would have been more highly prized in a following a different recipe had the chef but been aware that the possibil-

ity existed.

The one thing this metaphor leaves out, of course, is that the economy is an *evolving* system, for rather than merely sticking with the self-regulating, homeostatic nature of a single organism, we have to consider the processes of change, adaptation, innovation, and discovery which are involved as a complex interplay unfolds between technical possibility, entrepreneurial alertness to opportunity, and the social and moral shifts in preference to which these must be harnessed over time.

In Nature, Life mutates to better fit its environment in which it finds itself but also, in the course of its own operation, to mould that environment into one which gives rise to newer, usually more advanced lifeforms. As this unfolds over the aeons, that environment usually grows richer, more complex, and more densely inter-connected – at least to the point where some shocking, sudden, external cataclysm intrudes and the teeming profusion must be built up, all over again.

The same is true of economic activity - if we leave it to itself to develop and to deliver a material progress which will be all the more rapid and assured if conditions are conducive to the flourishing and proliferation of that keystone species, the breed we call 'entrepreneurs'.

Just as in Nature, where no individual species, much less any single member of it, is guaranteed to thrive, so it is with product lines, business ventures, even entire industries and professions.

We should, however, bear in mind that individual failures are not only frequent, but arguably so intrinsic to the enrichment of the ecosystem that to seek to prevent them is not only to stultify it, but possibly to turn it toxic. Conversely, in the realm of economics, the parallels to the natural world's thankfully rare mass extinctions and genetic bottlenecks are entirely Man-made and so occur much too frequently on that account, given that human folly is much more constant than is any highly episodic instance of planetary upheaval.

In the economic world, it is not asteroid impacts, suddenly melting ice sheets, or mass volcanic out-

gassing over which we have to fret, but rather it is legal inconstancy, political cupidity, and central bank intrusiveness which pose the truly existential - and lamentably ever-present – threats to human progress and entrepreneurial advance.

Either way, it should now be clear why it is not 'The Consumer', seen as a member of some entirely distinct species, who 'drives the economy' but rather that the linchpin of its development is that same person's success in performing his alter ego's overlapping and largely concurrent role as a producer.

Too Many C(r)ooks

Only if that execution is organised not to squander resources; only if he can profitably provide things which other Producers in their turn will wish to consume; only if he can exchange the exercise of his skills and the employment of his capital for that of theirs, will he and they, both, have the keys to the well-stocked, diversely-laden - and hopefully ever more capacious - larder which they all desire, jointly and severally, to build and maintain.

The laying down of such forms of organization is in no way assisted by what Hayek called the bureaucrats' and public intellectuals' 'fatal conceit' – viz., the rulers' presumption that they can not only determine what *should* be done, better than can the voluntary, localised interactions of the millions of their fellows over whom they would hold sway, but also that they have more than the most superficial knowledge of what *can* be done.

To use another trenchant Hayekian phrase, this, what he termed their 'pretence of knowledge', is not just empty arrogance, but is actively pestilential - as we will all increasingly come to realize if the current cynical stoking of climate hysteria unleashes what its many sponsors hope will be the full force of global Green Collectivism upon an unsuspecting populace.

A well-ordered polity, therefore, is one which limits the reach of this Nomenklatura and closely checks its scope for action. Remote, party machine politicians, supra-national regulators and rule-givers, untrammelled technocratic titans like today's hubristic central bankers - these are all, in effect, the most voracious of consumers and equally the producers of little to which value can be accurately ascribed, not to say much that is actively detrimental to the common weal.

Not only does this class of 'clerisy' and its associated crowd of cronies, clients, and contractors consume our goods and our capital but also our liberties - and all this in quantities as hardly conceivable as they are often handily concealed.

So pervasive is their influence and so pernicious its effects in confusing all other actors and in degrading the signals which help co-ordinate their mutual dealings that these are perhaps the only 'consumers' who *do* 'drive the economy' - but drive it, alas, not onward, but into the ground.

Dotting the I's

So, to summarise our main conclusions:-

- Consumption personal, 'hedonic', exhaustive consumption is an end not a means
- Production both of what we consume ourselves and much more typically of what we exchange for the produce of others precedes consumption both logically and sequentially.
- That precedence necessarily involves the passage of time, the bridging of which passage requires genuine capital i.e., that fraction of our real resources which we have set aside from personal, 'hedonic', or exhaustive consumption.
- If the widely-dispersed, vertically-integrated, finely sub-divided, highly-specialized acts of production of whose discharge our wondrously successful and generally progressive economic 'machine' consists are to proceed with the least possible interruption, prices must be left free to reflect the relative strength of the myriad competing calls upon our finite resources so that the scarcest means are first put to the most insistent of ends.
- Combining these two concepts, the relationships between the prices of goods-in-being and-goods-in-embryo even of goods-in-conception must also reflect, as accurately as possible, what those in the system tell us they most want and when they want it.

- This is something they signal by voting their dollars and, in turn, by devoting their efforts to earning those dollars as they in turn are signalled.
- Put another way, the relation between goodstoday and goods-tomorrow should be such as to give a clear indication of the degree of patience people are willing to display in foregoing the exhaustive use of what they have now so that this may contribute, not to immediate satisfaction, but – in the form of capital - to the fabrication and delivery of what will better satisfy them later.
- That relation, therefore, is intimately bound up with the rewards of temporary forbearance: what psychologists call, 'delayed gratification', what economists call 'time preference', and what we refer to here as the 'price of timeliness'. In this is the true foundation of the interest rate.
- Note that, as saving and entrepreneurship progressively combine to alleviate wants of the more undeniable kind ever more fully, the urgency with which we express desires for the less exigent items on our wish list tends to fall. This reduction in urgency implies lower overall time preference, a fall in the price of timeliness, lowered interest rates, and so a greater ability to put what will be increasingly abundant capital to longer-maturation, more slowly amortizing (more 'roundabout', in the jargon) uses which tend, over their useful lifespan to be highly, if more deliberately, productive of value.
- The successful use of previously-formed capital therefore both increases the surpluses which may be employed as capital in the next productive round and lessens our desire to consume it hedonically, instead. In this virtuous circle lies the secret of the past 250 years of human advance and in the many official actions taken to break that circle lie the greatest threat to its happy continuance.
- Even when the two act in near-simultaneity, the co-ordination of productive possibilities with consumptive preferences is difficult enough to achieve without it being too greatly confused by outside, non-market forms of interference.
- Profits show we have not yet fully matched the two schedules: losses that a significant part of our effort to do so has been misplaced.

- On that account, it should not be hard to see that when such co-ordination must additionally take place over protracted intervals of time, it becomes even more challenging a task. Interference with the formation of the principal price involved the rate of interest is thus perhaps the most prolific source of endemic error, entrepreneurial misdirection, and wholesale loss, i.e., of the entire wastefulness intrinsic to what we call the 'business cycle'.
- Though mistakes are unavoidable and losses ever-present, a market free to generate its own signals and to develop its own feedbacks should not propagate these missteps at all widely, much less amplify them into something which threatens to disrupt the whole, highly-redundant and usually robust network of interactions.
- It usually takes the uniquely perverse talents of the state and its associated banking apparatus to overcome such natural resilience and so lead us on to commercial disaster, to borrower default, and finally to business depression.
- Contrary to the uncomprehending fears of the mainstream, to consume too little, over any appreciable length of time, is an almost unthinkable act of self-denial. Conversely, to consume too much is an eternal temptation which demands we forego all efforts further to excite it.

To produce too little is to discover that too much of the capital needed for its consummation has already been consumed. To produce too much – strictly, too much of the wrong sorts of goods, in the wrong place, at the wrong time – is direct evidence that the transmission of economic signals has been jammed by forces originating *outside* the market framework: forces usually concerned not with liberating production, but rather with exciting added exhaustive consumption in accordance with the false prescriptions of consensus economic doctrine.

And therein, for us Austrians, lies the greatest and most persistent folly of them all.

Sean Corrigan

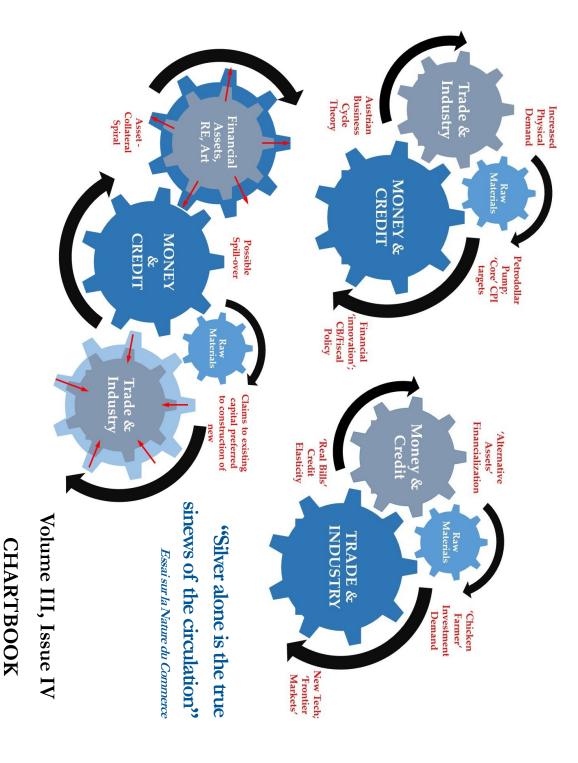
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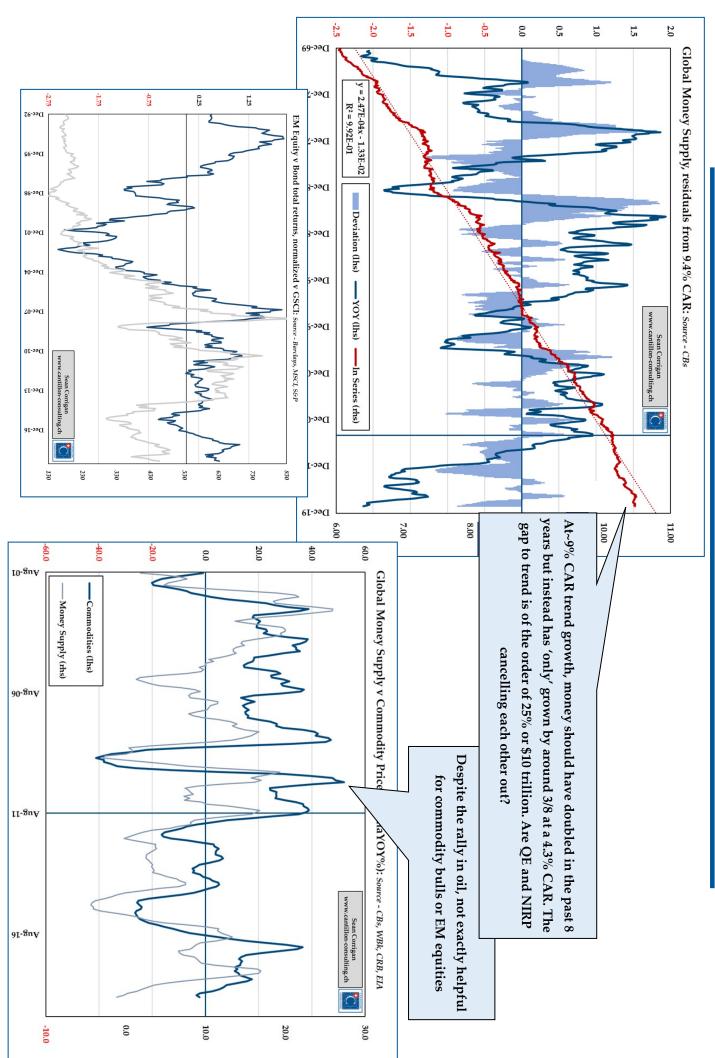
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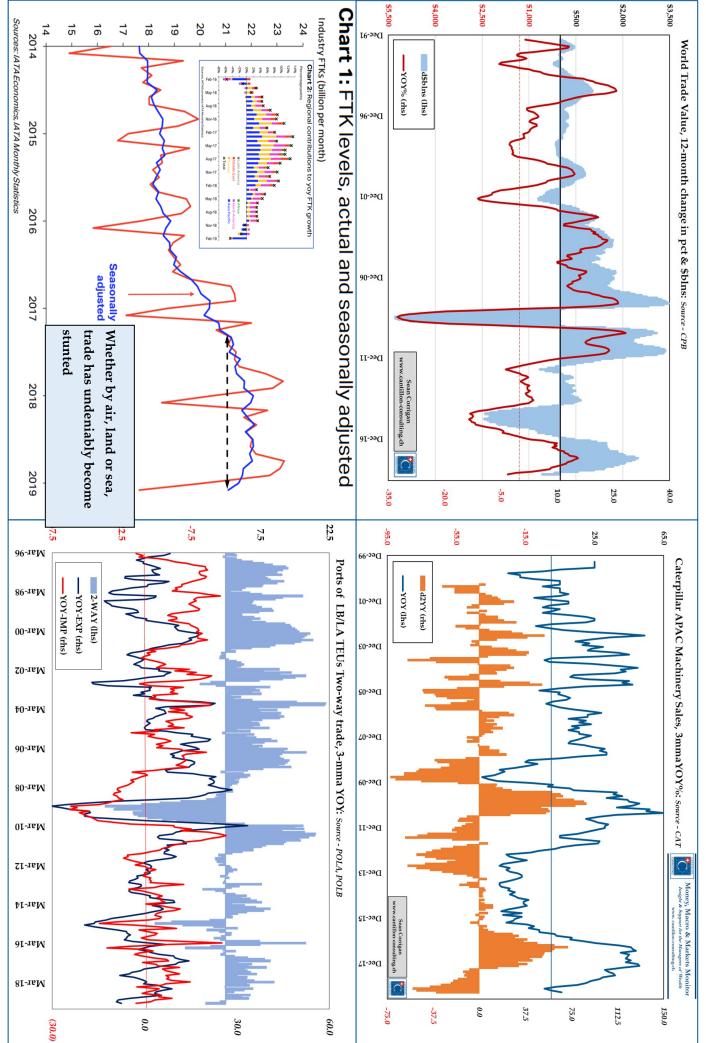


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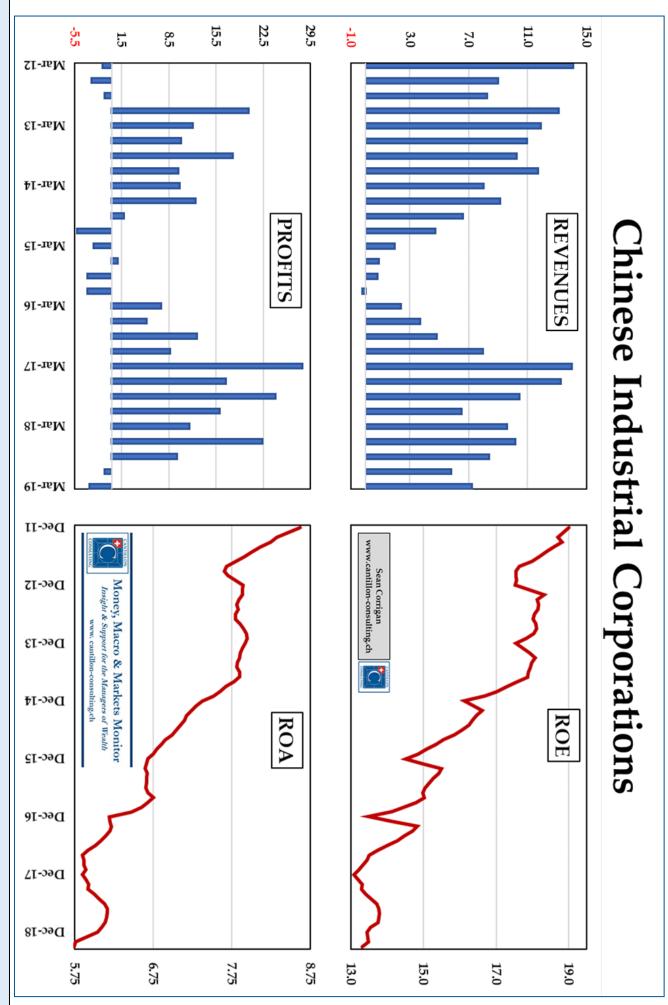
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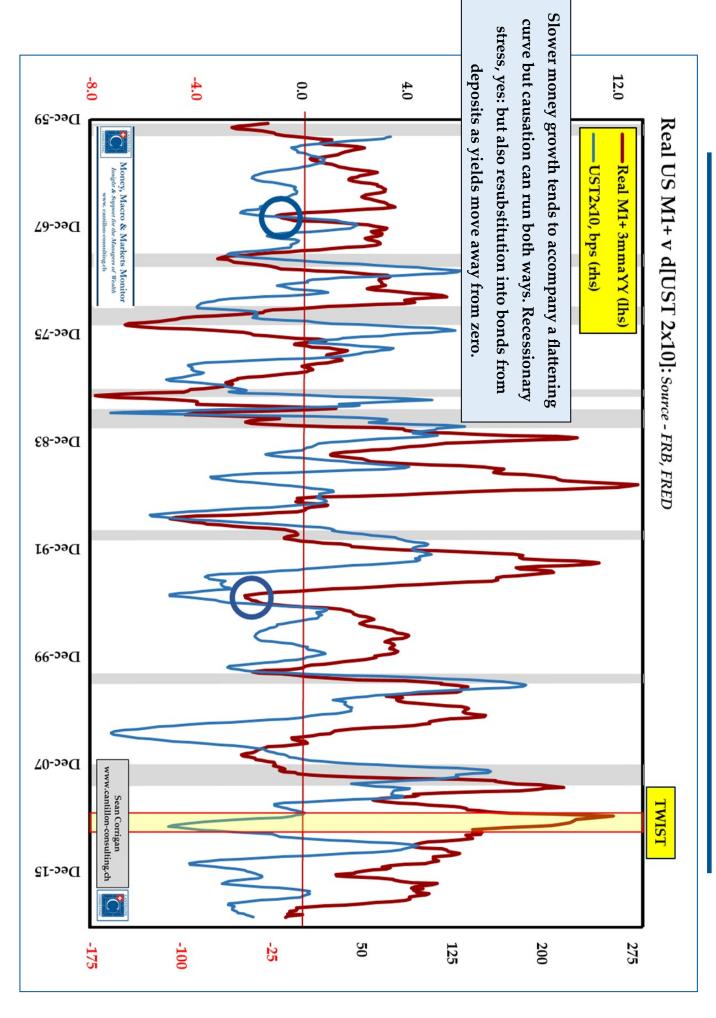
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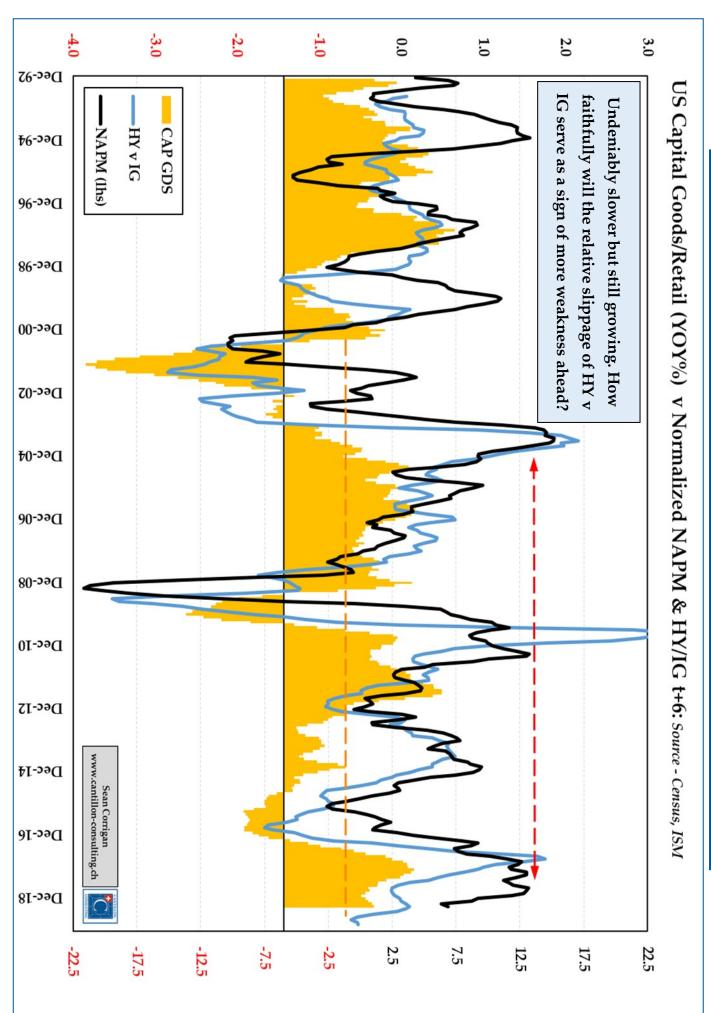


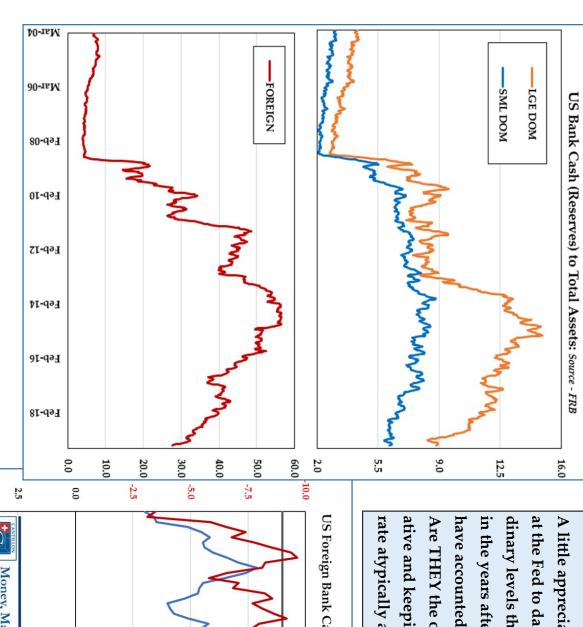
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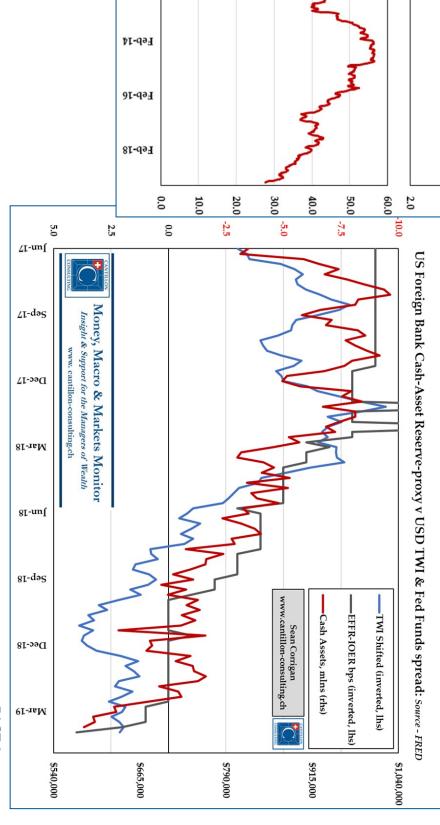
Amazing how little you get for \$1 trillion dollars in new credit, these days, isn't it?

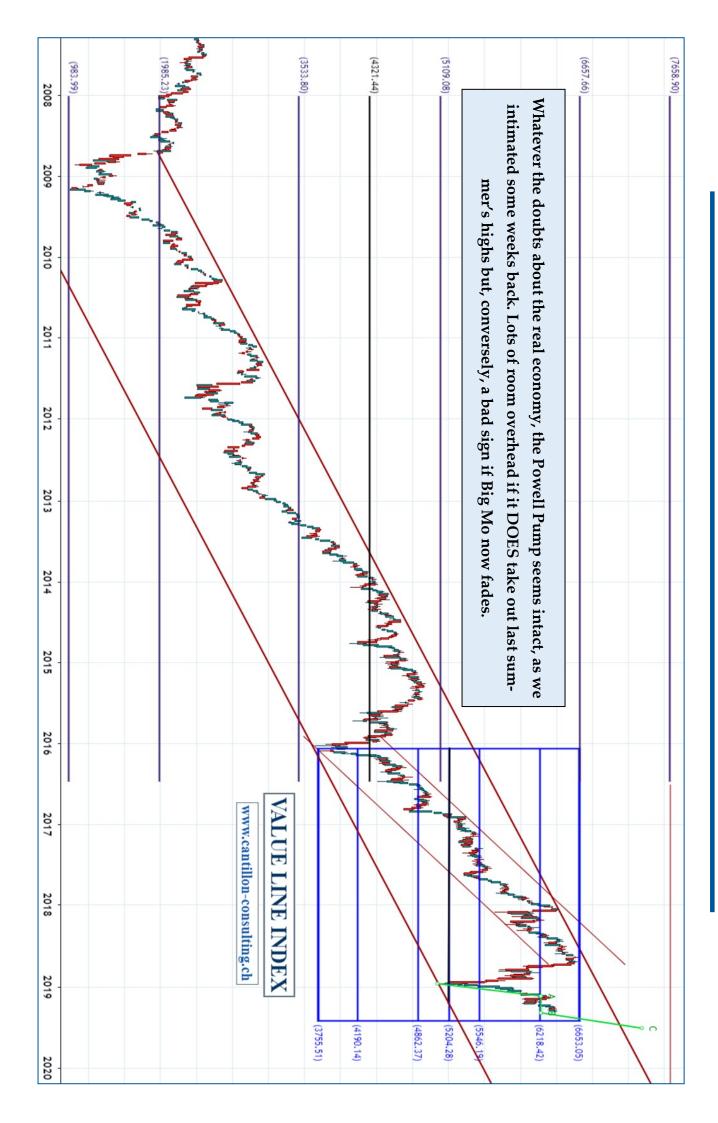




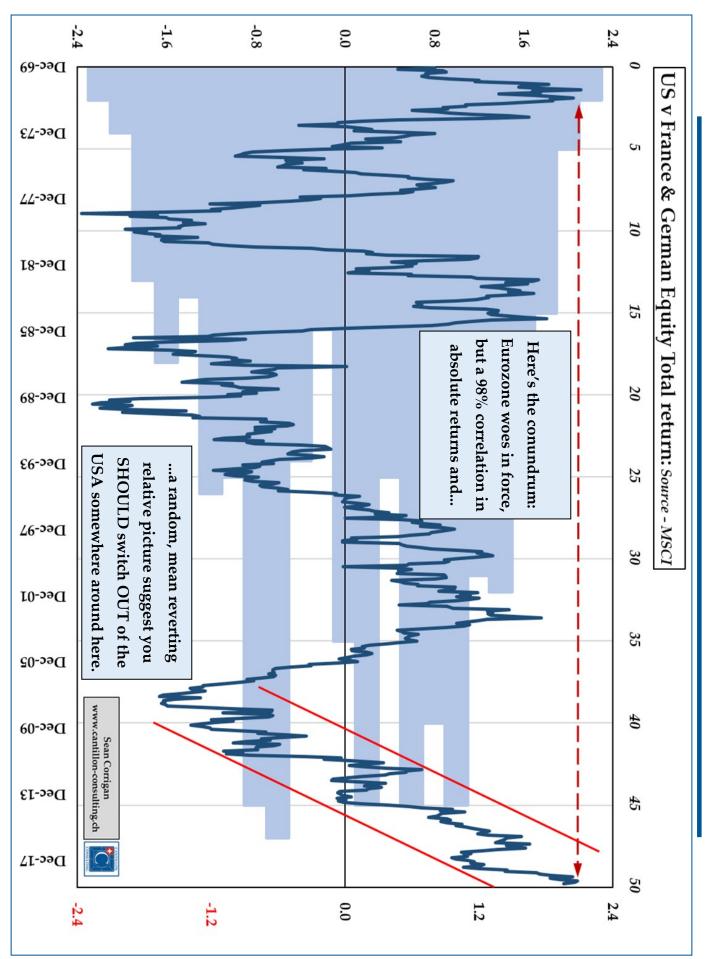


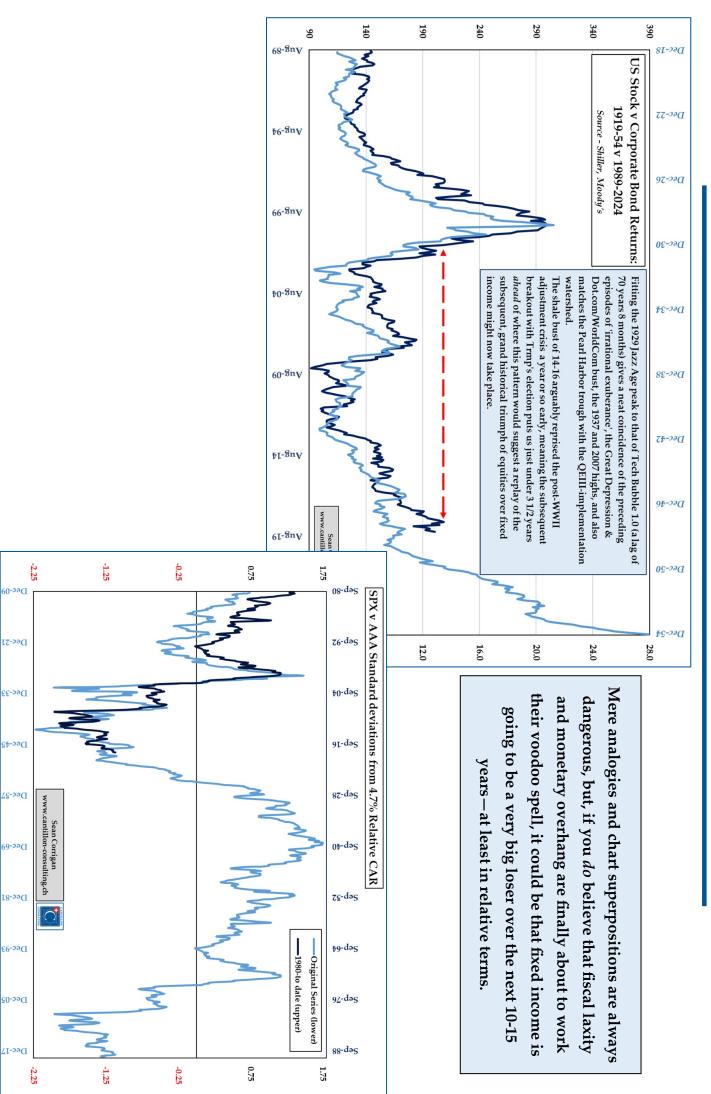
A little appreciated fact is that some 60% of the decline in reserves held at the Fed to date has been due to *foreign* banks' reduction of the extraordinary levels they held—presumably against their eurodollar business—in the years after the Lehman panic. Indeed, in the last 10 weeks, they have accounted for \$7 out of every \$8 of shrinkage (\$175 billion in all). Are THEY the ones suffering a minor squeeze, pushing basis swaps negative and keeping the USD bid, as well as moving the effective funds rate atypically above IOER?



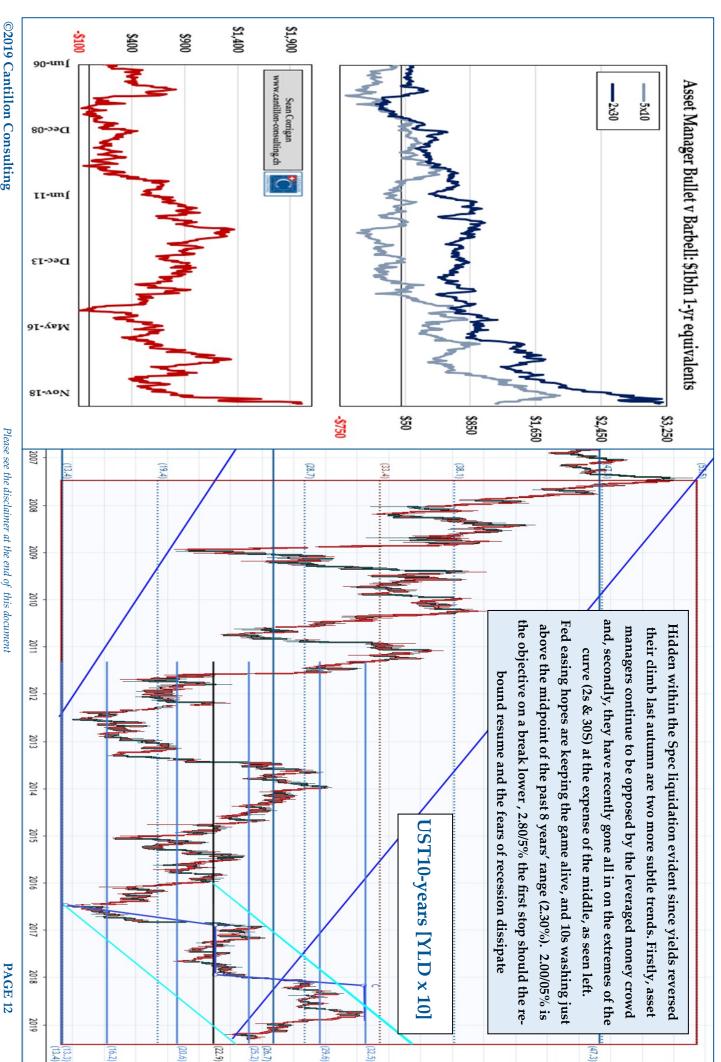


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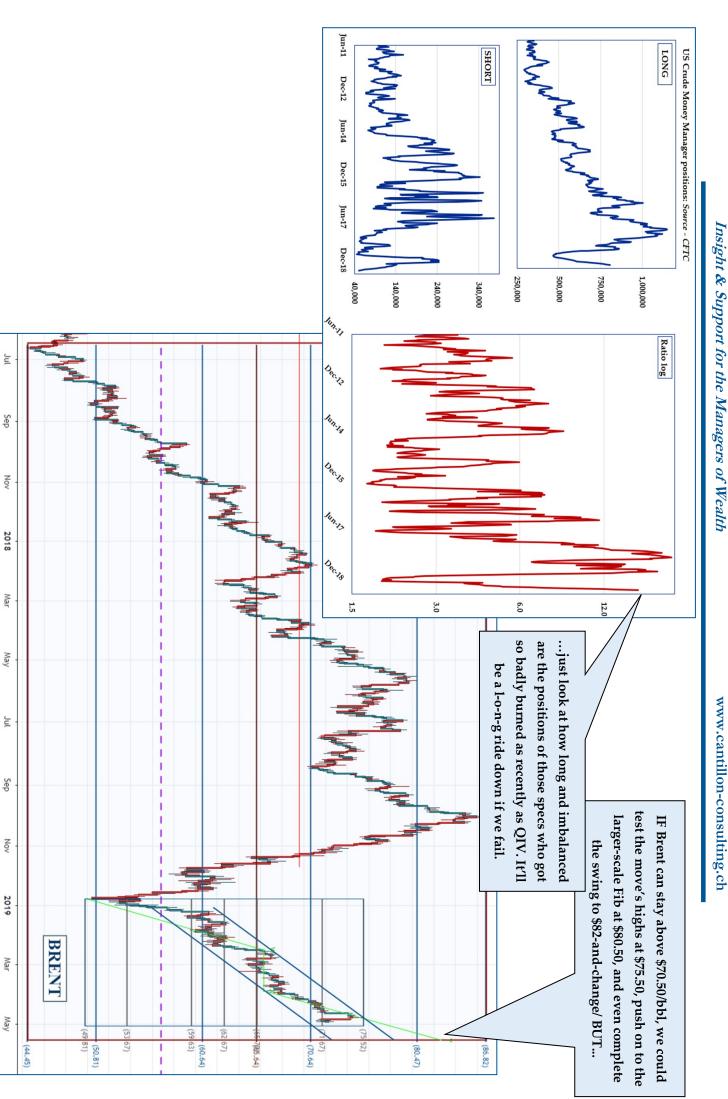


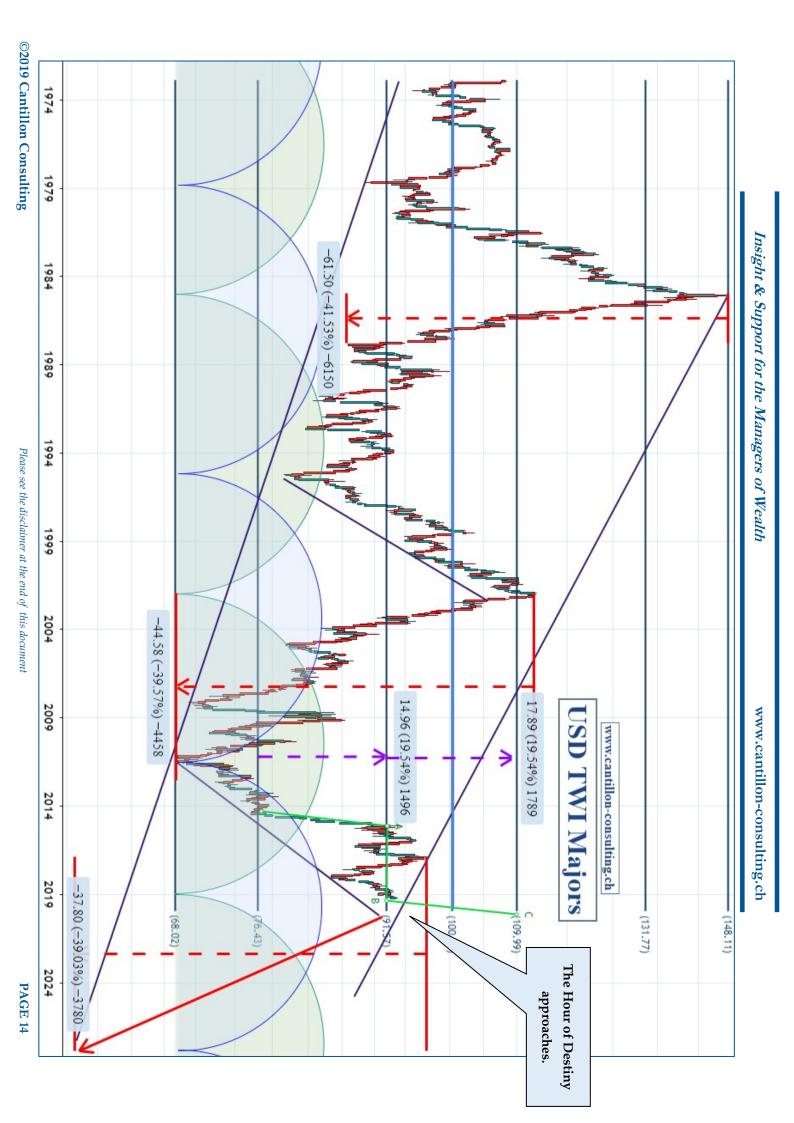


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appropriate professional advice if any points are unclear. your original investment. Changes in rates of exchange may have an adverse effect on the value or price of the investment and you ment. Accordingly, a relatively small adverse movement in the price of the underlying asset can result in the loss of the entirety of means that a small movement in the price of the underlying asset may have a disproportionately large effect on that of your investmay get back much less than you paid for them. In the case of investment trusts and certain other funds, these may use or propose or 'spread' between the buying price and the selling price, a circumstance which means that, should you sell them immediately, you your investment. You run an extra risk of losing money when you buy shares in certain securities where there is a large difference material respects. All data is from sources considered to be reliable but its accuracy cannot be guaranteed. Investors should seek assets mentioned may have tax consequences regarding which you should consult your tax adviser. All reasonable care has been may find them to be 'illiquid'. You may not easily be able to trade your illiquid investments and, in certain circumstances, it may traded in your home currency. Some investments may not be quoted on a recognised investment exchange and, as a result, you should be aware that additional dealing, transaction, and custody charges for certain instruments may result when these are not to use the borrowing of money in order to increase the size of their exposures and/or invest in other securities with a similar stratmentioned with money you cannot afford to lose. In some cases there may be significant charges which may reduce the value of recoverable; others may expire worthless after a specified period. You should not buy any of the securities or other investments them, can fall as well as rise. Your investments may be subject to sudden, often substantial, declines in value which may not be taken to ensure that all statements of fact and opinion contained in the either written or spoken form are fair and accurate in all become difficult, if not impossible to sell the investment in a timely manner and/or at its indicative price. Investment in any of the ing investments. Some investments may involve a high degree of such borrowing (often referred to as 'gearing' or 'leverage') This egy. As a result, movements in the price of the securities may be more volatile than the movements in the prices of those underlyfor your own circumstances and risk preferences. The value of all securities and investments, as well as the income derived from for every individual and you should use this information in conjunction with other advice and research to determine its suitability All content is intended to give general advice only. The investments and instruments mentioned therein are not necessarily suitable

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