

“Making money with your brain is hard in Ghana”, one company’s efforts to disprove this

Intravenous Infusions’ CEO praises Ghana Stock Exchange

A few days ago, it was reported in the Ghanaian business press that the CEO of biopharma firm, Intravenous Infusions, has [profusely praised](#) the Ghana Stock Exchange for its role in helping the company to “double its capacity and sustained profitability”.

Seeing as I [wrote recently](#) about the Ghana Stock Exchange having stagnated in value creation terms for decades, his statement naturally stoked my interest.

A legendary beginning

On top of that, I have held a long fascination for Intravenous Infusions. It is one of the few second-generation companies in Ghana still going strong, and in manufacturing of all areas. It was co-founded in 1969 and launched in 1974 by literally the first person in Ghana to be endowed with royalty as a “Development Chief” (*Nkosouhene*), and by no mean a figure than the former King of the Asante himself. Emmanuel K. Osei’s career is genuine testament to the truth that brilliant Ghanaian entrepreneurs can draw on cultural heritage even as they pursue modernity.

E.K. Osei worked closely with future salt magnate, Samuel C. Appenteng to convince Ghana’s then preeminent development finance institution, NIB, to back the new biopharma manufacturing enterprise. The day General Kutu Acheampong, then military head of state, held the first ampoules of clinical fluids in his hand, his smile could have illuminated the Korle Lagoon at night.

Another key actor in the founding story is Professor Kofi Oduro (grandfather of a well-known charismatic preacher in Ghana today), a renowned figure at the Ghana Medical School. Professor Oduro was an important source of technical insights for the young company and very likely brokered the relationship with Vifor, the Swiss specialty biopharma company recently acquired by Australia’s CLS for more than \$7 billion. Vifor will license the technology for Flex-Flac, the company’s first flagship product that will feature in its first major ad campaign. Vifor would, in fact, retain the equity they got in Intravenous for decades.

Do you know the advantages of Flex-Flac?

Available on the Ghana market

Transparent

- Constant control of the solution

Flexible

- Easy mixing of additional drugs
- Simple fast infusion
- Air-inlet unnecessarily

Unbreakable

- Easier handling

Disposable

- Absolute safety

Sterilized in the autoclave

Pyrogen-free

Vial stopper

- Convenient switching to next Flex-Flac
- Easy addition of drugs with the syringe

 **Intravenous Infusions Ltd.**
P.O. Box 2274 Accra,
UNDER LICENCE OF
 VIFOR SA GENEVE / SUISSE

An early Intravenous ad for Flex-Flac. Source: GPJ (1974)

Collaborating with academia and research institutions to develop medicinal fluids would become an important source of competitive edge for Intravenous throughout the succeeding decades, a natural hallmark for any company in the brainwork-intensive segment of any economy.

Being an industrialist in Ghana is not rosy

Ghana's industrialists are an endangered breed. Many have refocused more and more of their energy into real estate, fast moving consumer goods, hospitality, and the like, after being burnt many times trying to do complex, brainwork-intensive, industrial stuff.

For the Osei and Appenteng families to keep Intravenous Infusions going for more than five decades is absolutely no mean feat. And to have professionalised management and opened up the company to outside ownership, even going to the extent of a stock listing with all the transparency that imposes, is a sign of something quite special in Ghana's business environment. Having [talked about](#) the "cultural compatibility" challenges preventing the country's stock exchange from becoming a major source of capital for entrepreneurship, any outliers certainly deserve my attention.

Intravenous Infusions is a great subject for this essay

For the above and other reasons, there is no perfect guidepost for tracing the evolution of the interplay between Ghana's Stock Exchange and the economy itself than Intravenous.

How does this storied company exemplify the ups and downs of business growth in Ghana? Has the Ghana Stock Exchange merely channeled the economy's tribulations to the companies it hosts or has it shielded and bolstered them to better ride the storms, as the CEO of Intravenous Infusions appears to suggest?

And, above all, what does the story of Intravenous Infusions have to tell us about the travails of those who try to build wealth by creating business models that can only grow by scaling up the ladder of brainwork intensity? In fields such as biopharma, for example?

Intravenous' early days on the stock market

On the back of my [earlier essay](#), my first instinct was to argue that the Ghana Stock Exchange has, contrary to the Intravenous Infusions' CEO's claims, actually stunted the growth of the company by undervaluing it. The basis of such a claim is easy to establish.

After a bumpy journey, which involved having to sack the initial broker in March 2015 for failing to underwrite its IPO, Intravenous Infusions finally debuted on the junior tier of the Ghana Stock Exchange, the Ghana Alternative Market (GAX), on 15th December 2015.

The original goal of the IPO was to raise ~\$6 million to shore up working capital at 12 pesewas (~4 US cents) a share. Low working capital, according to the company, was constraining its export and domestic growth opportunities.

At the end of the IPO, it successfully raised about ~\$1.8 million (out of the revised target of \$3.2 million) at 8 pesewas a share (~2.3 US Cents), significantly lower than it had envisaged when it first published its prospectus. In the circumstances, the company had to raise more money through a private placement (target: \$1.3 million) to bring it closer to its working capital goals.

In short, trying to raise money on the Ghana Stock Exchange was a pain in the company's neck. Not a great start.

Nonetheless, Intravenous' first few years on the stock exchange saw positive results.

By December 2016, its share price had risen to 9 pesewas or 2.27 US cents. A year later, a reorganisation of the business and, obviously, the capital injection were bearing fruit. Revenue increased by more than 55%. More critically, earnings per share saw annual growth of more than 307%. The company's revenues were ~\$3.6 million, gross profit was at ~\$2.2 million, and net earnings came to a respectable \$600,000. More than 60% of all intravenous fluids supplied to hospitals and clinics in Ghana by this time came from the company.

Consider that in the two years before the IPO the company had run losses for two years straight. Revenues had dropped from \$2.88 million in 2011 to \$1.44 million by end-2014, effectively halving. Normally companies go to the stock market when revenue is growing rather than falling. In that sense, despite the hiccups, listing on the stock market clearly had a redemptive value. But let us see.

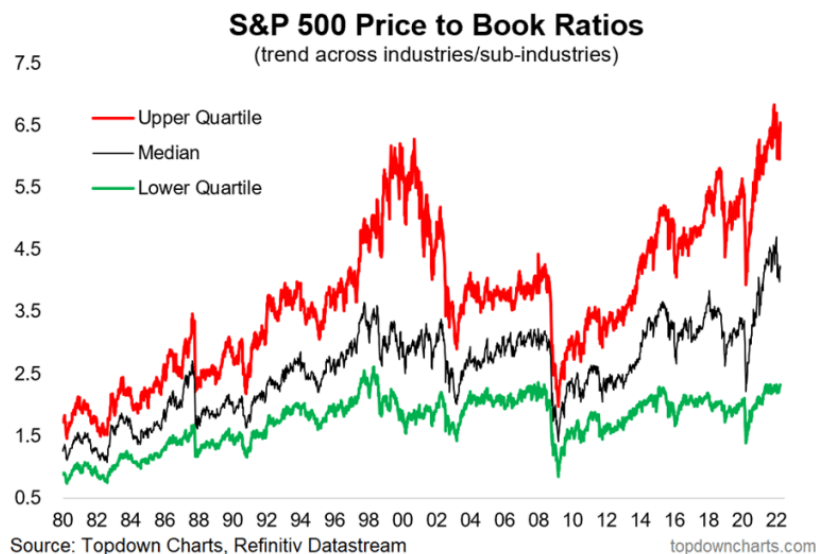
A technical sidenote on valuing listed companies

A quick shorthand for measuring how investors on a stock exchange value a company is to look at the price-to-book ratio. It is a rough and ready guide to investor sentiment not only about the inherent worth of the company's current assets (regardless of what its

accountants may think) but also its future growth potential. At the end of the reporting period in 2017, Intravenous' price-to-book (P/B) ratio was 2.

“2” is not a fantabulous P/B ratio in the frothy markets of America and parts of Asia. As the chart below shows, top-performing companies in the US have an average P/B these days in the “7” and “8” range. A truly hot company like Nvidia or Apple could even have a P/B above 50. Apple's average P/B over the last 15 years is above 10.

But in Ghana, a P/B of 2, especially on the GAX, is rather respectable (MTN Ghana, on the main exchange, has a P/B of 3.36 today). If we are to be strict about the matter, we must even apply a “liquidity discount” of about 50%, because of how low trading on the Ghana Stock Exchange sometimes depresses the true market capitalisation of listed firms. If permitted this discretion, then the effective P/B may well be 3, which would be better than low-performing stocks in the US.



As a side note, it is because some stocks are undervalued by the Ghana Stock Market on a P/B basis that, historically, foreign corporate treasurers buy 60% or more of all stocks on the domestic exchange whilst Ghanaian corporate treasurers, perhaps under less pressure to diversify from fixed income assets like treasuries and bonds, often hover around 20%. Anyway.

The Nosedive

But this bliss was not to last. By 2019, Intravenous' P/B was down to 1.25 (some online services still has this number, apparently because they are yet to update). This morning, I checked. By my calculation (using the net book value on page 27 of its latest audited accounts), its P/B is now 0.62. Conventionally, a P/B below one is an indication of relative undervaluation of a company by public investors.

Intravenous' share price is now just 5 pesewas. That is 0.3 US cents, well down from its debut price of 2.3 US cents. Anyone who bought Intravenous at the peak of its share price and held on to the shares would have lost ~87% of the value of their investment by now. Earnings per share is down from 0.26 US cents in its 2017 heydays to 0.08 US cents, a 70% decline.

Is it the company or the market?

Would it be fair to say that Intravenous has been ill-served by the Ghana Stock Exchange? Or is the more accurate framing that investors have acted rationally given the company's economic circumstances?

First, the facts. Per its latest audited financial statement, Intravenous revenues is now about \$2 million. This is lower than the \$3.6 million it made in 2017 for sure. But, perhaps more worryingly, it is lower than the \$2.88 million it reported in 2011, four years

before it listed on the stock market. Even though the company is now more profitable than it was in 2014, the year before listing, has a healthier balance sheet, and superior margins, it has only added about 30% of its 2014 revenues over the last decade.

The Real Analysis

Except, of course, throughout this analysis, I have consistently used the USD – GHS rate. And not just for the convenience of keeping the numbers wieldy.

Using the USD – GHS rate has really been about filtering out the effects of inflation and showing its wealth-erosion force in grand style.

It is true that Intravenous’ net margin has dropped from 16% in 2017 to 8% today. But that only explains half of the reason why net earnings are down from \$600,000 to \$160,000 over the seven year period.

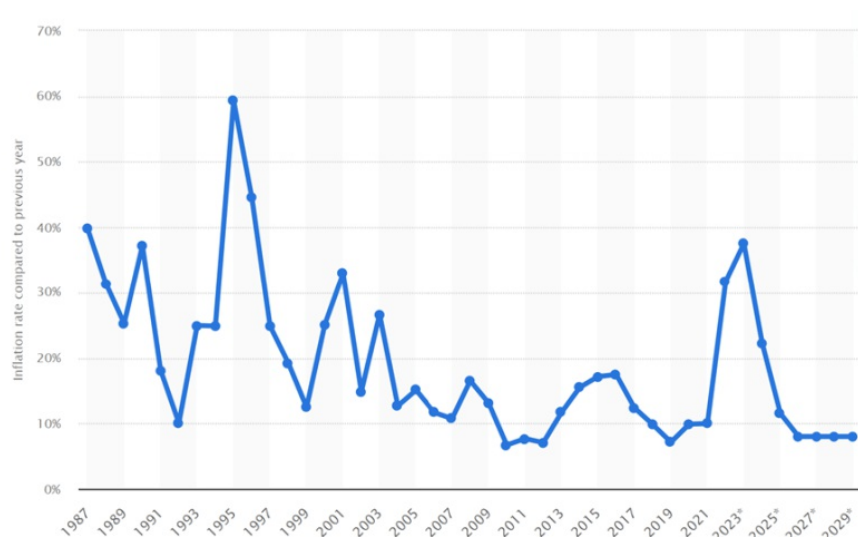
Hence, while a rational investor would be acting within reason to undervalue and under-trade Intravenous stocks *in this environment*, it has, perhaps, little to do with the performance of the company’s management or board. It can be said, without putting too fine a point on it , that the board and management have steered the company excellently in such volatile macroeconomic conditions. Why do we say that? Because even in these circumstances, they still grew revenues by 54.3% year-on-year over the last reporting period. Same as in 2017.

But there is an even more important dimension to consider.

Some obvious facts about inflation and purchasing power

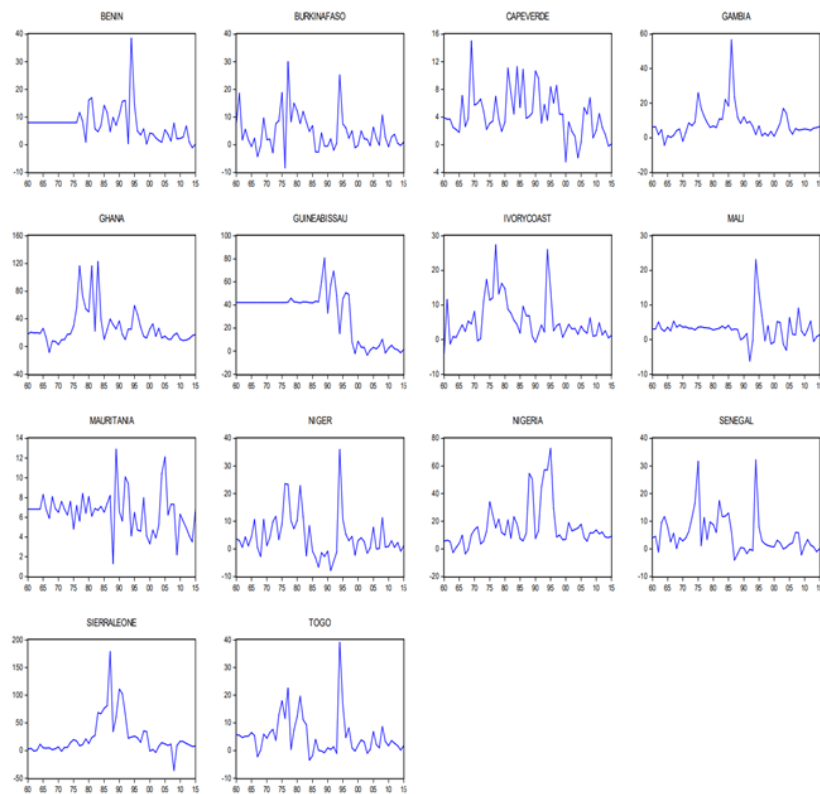
I said that the exchange rate trends filters out the inflation effects quite effectively.

Compared with its peers, Ghana’s average inflation rate since the 1960s has been quite something! Whilst the average inflation rate between 1960 and 2023 in Nigeria is 16.2%, the equivalent rate in Ghana is more than 27%.



Ghana’s historical inflation rate. Source: Statista

Comparatively, it has been 4.8% in Senegal and 5.4% in Ivory Coast. Only Guinea Bissau has recorded a higher historical average inflation rate than Ghana in West Africa. Even compared to peers across Africa, Ghana’s feat is remarkable. The country ranks seventh, only behind the likes of Zimbabwe, DRC, and Sudan.



Peer comparison of regional inflation.

Source: Franses & Janssens (2017)

To reinforce the point about correlations, the average annual depreciation of the GHS against the dollar between 1992 and 2020 was about 17%, one of the highest rates in Africa.

High consumer inflation erodes purchasing power among waged workers moving into the middle class and forces them to retain certain shopping behaviours. They continue to only buy basic and simple commodities which are produced, imported, and sold by the highly informalised levels of the economy. The producers and marketers of such basic commodities being better able to adjust to inflation.

Those producing higher-branded goods, and goods with higher technological and knowledge content, find themselves stuck in an eroding or stagnant market base (because their formal economy patrons continue to be squeezed by high inflation) where growing revenue becomes almost impossible. All the sophisticated biopharma entrants in the last three decades have thrown up their hands in the air. Only those producing the most basic pharmaceutical compounds and molecules continue to survive.

There is nothing interesting about the above inflation point, true. Everyone who lives in Ghana knows it. There is also a lively and active debate about how high inflation in Ghana nevertheless correlates with high real GDP growth rates, at least compared to our low-inflation Francophone neighbours.

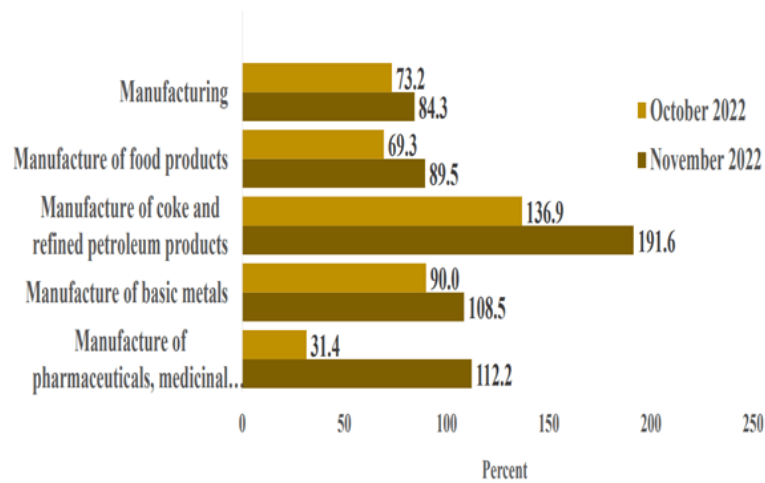
What is interesting however is the differential effect of this inflation canker on manufacturing, generally, and the most knowledge/skill-intensive segments of manufacturing, specifically.

Brainwork Intensity

It is not only the demand-side or consumer inflation that is important in this matter. Producer-side or industrial inflation is equally significant. In Ghana, the inflation rate at the producer-side has been persistently higher on this level than on the consumer level.

Worse still, manufacturing is one of the sectors worst-hit.

Take late 2022, for instance. Annualised consumer inflation was about 50%. The producer-side inflation in the two most technologically intensive sectors in Ghana, mining and manufacturing, on the other hand, was 115.6% and 84.3% respectively. And if that is not shocking enough, it is those areas in manufacturing requiring the highest inputs of brainpower – chemical refining and biopharma -that saw the highest rates, topping 100%, and in some cases hitting 200%.

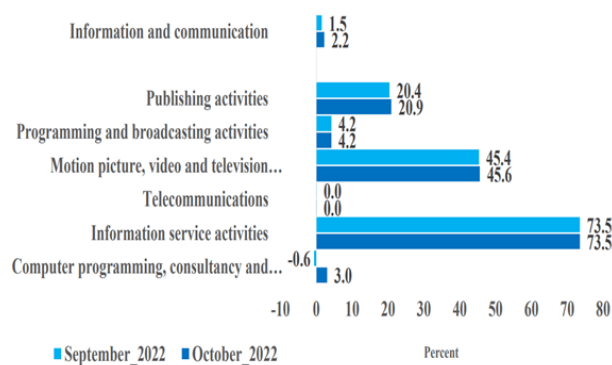


Manufacturing PPI in Ghana

Source: Ghana Statistical Service (2022)

In short, the high inflation problem in Ghana has evolved to constitute a highly punitive super-tax on the most sophisticated and brainwork-intensive levels of the economy. These beleaguered operators struggle the most to pass the effects of pricing onwards to consumers.

To support the thesis that this problem correlates with sophistication, crudely approximated by brainpower, it is gratifying to note that in the high-value services sector as well, similar dynamics are observable. Brainwork-intensive sectors like computer programming often face the highest input inflation.



Service PPI in Ghana

Source: Ghana Statistical Service (2022)

The challenges identified are compounded, and perhaps also explainable, by the fact that manufacturers also tend to have longer invoicing cycles (and where government or big corporations are their main clients, a weaker bargaining position as well); their pricing with distribution networks are locked in for longer; and, of course, receivables pile up more easily and more persistently.

In the case of biopharma, the oversized role of the government in the market is also a serious challenge. Nearly 90% of Intravenous' sales at the time of the IPO went to hospitals and clinics controlled by the government. It is not surprising then that more than half of receivables are more than 4 months overdue in the last reporting period, with nearly 20% being one year or more overdue. That figure has more than tripled from what prevailed in 2016 as the fiscal situation of the Ghanaian state worsened in

recent times. A situation exacerbated by the fact of the government, the company's most chronic debtor, still accounting for 80% of receivables today.

Government's regulatory efficiency in highly regulated sectors like biopharma also deserves scrutiny. It was curious to note that despite having operated for more than 40 years, Intravenous, on the eve of its 2015 IPO, had still not been able to get the Environmental Protection Agency to upgrade its permits from the provisional one it issued years ago. In a similar vein, I was recently alarmed to hear from one of Ghana's most advanced low-carbon fuel producers that their entire export market has been shuttered for close to a year due to simple intransigence on the part of the Energy Commission to expedite a licensing review.

On the plus side, and to be balanced, it is worth mentioning that Intravenous was one of the companies that received a stimulus package from Ecobank in the form of a loan with 50% of interest subsidised by the government in the wake of the pandemic.

Conclusion: Aluta Continua!

In short, many things seem to conspire against businesses and entrepreneurs attempting to rely on brainpower, and the competitive edge that comes from it, to win in the Ghanaian market.

Yet, many Ghanaian business leaders and managers work overtime everyday determined to disprove this. Those in excruciatingly challenging sectors like manufacturing find ways to bolster their vision by side-investing in faster-yielding opportunities. Ghana's biggest indigenous beverage maker is pushing deeper and harder into the real estate industry. One biopharma pioneer long diversified into commercial property and logistics.

Intravenous Infusions clearly has no intention of being left behind. In March this year, the company incorporated a new subsidiary, FlexFlac, named for its first market breakthrough product. Its mission is to ramp up aggressively into the wholesale and retail of agrochemicals, pet food, medicines, and nutraceuticals, among others.

Brainwork-intensive business may be noble and sexy, but without basic sugar even the most complex brain dies.