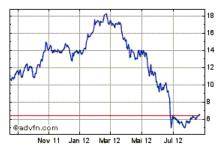
OGX beyond the Hype

Eike Batista has turned into an enigmatic figure over the last few years, riding the crest of the Brazilian economic wave and the country's oil and gas boom. He has become a symbol of entrepreneurial success in the vast new emerging markets, acclaimed for his shrewdness in operating within Brazil's aggressive new form of capitalism and publically aspiring to become the world's wealthiest man. Yet, since February, the value of EBX Group, his holding company has fallen by more than 60%. Thus he is now languishing—unable even to support the claim that he tops Brazil's rich list.



Eike Batista – Number 7 on the Forbes' Billionaires' List in 2011

The explanation for this sudden change of fortune has its roots in the performance of Eike's flagship oil and gas company—OGX, which went public in July 2008, at the height of the oil price bubble and represents the major proportion of EBX's value. Severely over-hyped, OGX soared to a market capitalization of roughly US\$41 billion by the end of 2010—a valuation that was very difficult to justify for an exploration company with no producing assets.



OGX missed production targets for the company's first producing wells in the Campos basin and triggered a rapid decline in OGX's share price in June. This in turn has created a credibility gap in company management and guidance estimates. For investors it inevitably boils down to the perception of risk. However, to assess underlying risk and whether such events justify a complete re-evaluation of OGX, we need to go back to the fundamentals.

OGXP3 Stock Price BRL - BOVESPA

The formula for success in the oil and gas business is; get the right people with the right developments coming together at the same time. Exploration companies like OGX are notoriously high risk, volatile and will have erratic earnings, particularly in their early stages of development. All the same, OGX's exploration record has been outstanding. Even as the focus is now shifting to development and initial production, the present emphasis by analysts on early production outcomes is misguided. Extrapolating the results of the first two or three producing wells is a tenuous process. OGX does not become a significant producer until 2016, according to current plans and so it is too early to make realistic judgements about true production capability. Notably, in the wake of the share price collapse, the OGX team has been reorganized to become more strongly focused on production and delivery—an important transition step in the evolution of a very young company. Astute investors should now be trying to get things in perspective and asking whether OGX continues to possess the combination of the best team and prospects to consistently find and produce oil and gas in profitable, commercial quantities in Brazil over the long-term. If this is indeed the case, OGX along with the rest of EBX's holdings are significantly undervalued at this time and perhaps this is why the savvy Mr. Batista is currently buying-back shares in OGX's closely linked sister company LLX.

The OGX Story

In reviewing the outlook for OGX it is important to recognize the reasons behind OGX's spectacular success in recent years and in particular the earlier confidence placed in it by the market, whether

founded or unfounded. It is a new company established only in 2007 that has rapidly become the largest privately-owned oil and gas company in Brazil and among the top ten by market capitalization on the BOVESPA. It has a leading position in the Brazilian exploration and production sector, based upon a highly successful exploration program drilling over 100 wells—second only to Petrobras in terms of its scope and first in terms of its success rate in finding oil.

At the same time as Eike Batista formed OGX in 2007, Paulo Mendonça, who was the previous head of E&P at Petrobras, joined as Chief Executive Officer. He was accompanied by many other members of his former team—the same team that had been instrumental in Petrobras' success in the central portion of the Campos basin and in the most important pre-salt discoveries. Moreover, the team had already discovered over nine billion barrels of oil equivalent (boe) and had know-how on a lot of other basins that had yet to be exploited.

Inspired by the team's in-depth understanding of the geology, in November 2007, Eike Batista raised US\$1.3 billion in an equity private placement, generating capital to purchase concession rights in the Ninth Bidding Round held by the ANP (Brazilian National Petroleum Agency). In this round, OGX selectively acquired concession rights to 21 exploratory blocks in the Campos, Santos, Espírito Santo and Pará-Maranhão basins, comprising a total area of 6,400 km².

OGX Blocks



Timing can make a big difference. Eike Batista founded OGX at what became a turning point in the oil and gas industry in Brazil. Armed only with the concession rights and a growing team of former Petrobras specialists, the flotation in June 2008 was shortly after the major Petrobras discovery of the Tupi field in the Santos basin, when oil prices were at their all-time peak and interest in Brazil and the pre-salt as the new oil province was at its height. Arguably there was little basis for the U\$\$4.1 billion IPO, as OGX had yet to produce a drop of oil; in what could be only regarded as betting on as yet undetermined potential. Nonetheless, it must be highlighted that OGX with an aggressive exploration campaign was able to sustain a high level of investor confidence maintaining a rising stock price through to the end of 2010. It held a market capitalization of over U\$\$30 billion until February 2012. Remarkably, the first oil was only produced by OGX in January 2012. A former head of the ANP explained this phenomenon—*Eike understands Brazil*, you gringoes who try to apply too much of your own logic will never understand Brazil.

From the outset OGX was in a privileged position, with a geo-science team that had intimate knowledge of geological region and potential prospects. They were exposed to a very different corporate culture at OGX. Gone was the over-riding bureaucracy of the quasi-state-company. They were heavily incentivized to work hard and this paid-off in terms of OGX's exploration results. From the 67 exploration wells drilled in the Campos basin, OGX now claims a 90% success rate; and from 12 wells drilled in the Santos basin a 70% success rate in finding oil and gas. These strike rates are almost unparalleled in oil and gas exploration even in Brazil, which is already known for much higher discovery rates than world norms. Unquestionably, OGX's achievements in exploration are a tangible answer to the critics and a clear indication of the team's ability to out-perform the industry in discovering oil.

Eike Batista and OGX's management team were supremely confident—spurred-on by their exploration success they talked-up production targets; publicizing a goal of 1.4 million barrels per day (bpd) of oil and gas by 2020. Debatably, had they taken a more conservative approach maybe the company's share price wouldn't have rocketed skyward the way it did, only to plunge when early expectations on production were not met. It was a disaster waiting to happen. In June, OGX was forced to slash its initial production guidance in half. The market responded in kind, by cutting OGX's value in half. Yet, before writing it off as another example of *over-promising and under-delivery*, it is worth examining the bigger picture to understand the true underlying potential of OGX.

The bottom line is now whether OGX has the capability to turn exploration success into commercial success, developing and producing oil and gas from the fields already discovered at a profitable level. It is too early to forecast with any accuracy the level of results that can be achieved in five years' time, as we are at the very beginning of this transition at the start of the development and production phase. Based upon current plans, it will take until 2014 before the company is producing sufficient oil (60,000 to 80,000 bpd) from its key Campos resources to become cash



FPSO OSX-1 en route to the Campos Basin

positive. Even then it will only represent approximately 2 per cent of Brazilian total production, rising to 10% by 2016/17.

Meanwhile, large field development is a complex endeavour and suffering some setbacks unavoidable. OGX's new found realism leaves some margin for error—an important realignment for the company. While management were caught-out in a clumsy attempt to build excitement around the share price, the true long-term value of OGX should not only be judged on this basis—just as it should not be based upon the output of the first one or two wells.

OGX's Niche

In assessing OGX's delivery capability it is important to take account of the quality and complexity of the resource base, as well as the development plans. In many senses OGX is a niche player, with a superior portfolio that is more accessible for development than the rest of the industry in Brazil.



There is a common misconception that all the major discoveries in recent years are in the presalt, deep-water, offshore Brazil's SE coast at water depths of over 2,000 metres. OGX's discoveries are not in deep-water at all and much less complex to develop. The first and most significant part of this portfolio is the 400 million barrels of reserves recently declared to be commercial in the shallow waters of the Campos basin—at an average water depth of 120 metres.

Operations in Campos

This development has a number of key advantages in terms of cost and the use of conventional technology, when equated with the deep-water pre-salt fields, mainly operated by Petrobras, which represent an enormous technical challenge at the frontiers of today's oil and gas industry expertise by comparison.

Moreover, OGX's next most important development asset is not offshore at all—it is an integrated gas and power project onshore in Parnaíba, NE Brazil, with the Thermal Power Plant ready to enter into commercial production in early 2013. OGX began its drilling campaign in this basin only in July 2010 and since then the company has identified more than 20 prospects and drilled more than 10 wildcat wells. This natural gas project at the Gavião Real Field has been executed in record time. It will begin production in the fourth quarter of this year, together with the commissioning of the GTU and the turbines of OGX's sister company's MPX Parnaíba Power Plant Complex. This is a clear demonstration of OGX's project delivery capability, albeit in a mid-size field development onshore.

The remaining blocks in the portfolio are still part of the exploration campaign, with a longer-term time horizon likely to be in production beyond 2016/17.

Firstly, there are five blocks operated by OGX (100% owned) in the Santos basin also in shallow water at an average depth of 150 metres. Thirteen wells have been drilled with some high potential discoveries of gas and condensate and some light oil. Uncertainty remains about the development of these blocks, which will need substantial additional capital and operational capabilities to produce the gas and pipe it ashore. Timing is also a factor as in many cases it will be necessary to seek an extension of the *Exploration Phase* prior to development with ANP or the blocks must be relinquished.

The two other main OGX areas in Brazil are new frontier exploration in the Espírito Santo basin with five blocks operated by Perenco (50% owned) in deep-water at an average water depth of 1,000 metres and in the Pará-Maranhão basin five blocks operated by OGX (100% owned) at an average water depth of 60 metres.

In addition OGX has four onshore blocks in Colombia—Cesar-Ranchería and Lower Magdalena Valley, close to the Venezuelan border. This can be seen as an attempt to diversify their portfolio away from Brazil. The seismic campaign is currently just beginning here and so it is too early to make any judgement about this resource.

In general OGX's resource base provides excellent reserves and production growth potential, but the data is still only indicative. As of December 31, 2010, based on volumetric reservoir estimates, third-party engineering firm DeGolyer and MacNaughton had estimated net 2C (best estimate) contingent resources of approximately 0.7 billion barrels of oil equivalent (and a high estimate of 3.0 billion). The 2C resources are primarily oil resources located in the Campos Basin, of which 400 million barrels of oil equivalent have been recently declared commercial and thus effectively converted to 2P or "probable" reserves. There is also a relatively smaller amount of natural gas resources in the Parnaíba Basin included. Unfortunately, none of these barrels are classified as proven reserves under the SEC definition thus giving the company little theoretical value based upon reserves potential.

When Exploration Risk turns into Development Risk

Eike Batista declared in his recent book: *Eike Batista's X Factor*—"Luck is important, as it is part of any project. But luck will only be present when the project is well designed." However, luck was not present in drilling the first two production wells in the Tubarão Azul field in the Campos basin and execution risk was playing its part. One of wells had to be shut-in to replace equipment and there was an unforeseen connection between two parts of the same reservoir. Essentially they drilled into the same fault block.

"A little like two straws drinking out of the same cup," an OGX spokesperson stated.

The consequences of what could be considered as normal technical problems encountered by OGX in drilling the first production wells and the subsequent failure to meet targets has had wide-ranging

repercussions for the share price. OGX were caught-out by bullish earlier predictions to the market. Anyone who understands the true nature of oil and gas development risk would have accepted that such estimates are far from an exact science—prior to drilling a production well, it is very difficult to predict the outcome. There are too many variables, in particular the reservoir pressures and depletion rates. Complexity of the reservoir in the Tubarão Azul Field is greater than originally anticipated. The company is choking back production levels in order to preserve reservoir pressure, consistent with reservoir management best practices. Yet, OGX is now paying the price for having over-sold the case, as production is well below the company's original estimated range of 10 to 20 thousand barrels per day per well and has been duly punished by the analyst community. Understandably, OGX is declining to give any further public production forecasts.

Meanwhile, production at the shut-in well was restarted in the second week of August and has boosted output from the field to between 10,500 and 11,000 barrels per day, according to OGX Chief Financial Officer, Roberto Monteiro. The share price ticked-up a bit on the news. OGX are now pinning their hopes on the neighbouring Tubarão Martelo field, where they have initiated drilling of the first two production wells. OGX believe that this field has more homogeneous reservoir characteristics and will produce at a higher rate. Although, good news here will have to wait until the end of 2013, when production is due to be brought on stream.



First Crude Delivery to Shell

Initial production from their first operational FPSO—OSX 1, with 60,000 bpd capacity is somewhat limited, as OSX have the ability to connect only 3 or 4 subsea wellheads to the vessel. With a current average output of 5,500 bpd per well in the Tubarão Azul field, it is unlikely to achieve full capacity and will continue to disappoint. Output from the field is now expected to average just 15,000 bpd by the end of the year, well below initial forecasts of nearly 40,000 bpd. The new FPSOs, OSX 2 and 3 are currently under construction in Singapore shipyards, each with 100,000 bpd capacity—expected for delivery and to be in production by the end of 2013. These should allow OGX to achieve the 60 to 80,000 barrels per day production goal by mid-2014 and become cash positive in the process. The final investment decisions have still to be made on OSX 4 and 5, with similar capacity. These units will not be in production until 2015 at the earliest.

The main ramp-up in production is anticipated in 2014, as the new Well Head Platforms destined for the Campos basin—WHP 1 and WHP 2, are bought on stream during the year. OGX will initially connect one producing well a month to each WHP for the first four months and then one well each 90 days, until 15 production wells are connected per platform. Although development of reserves potential undeniably will take longer than originally thought; the critical issue is to decide if the current more realistic approach will deliver.



Well Head Platform

OGX continues to modify its development plan, due to material delays in the construction of two wellhead platforms, which are being constructed in Brazil by Techint. As a result of these delays, OGX expects to solely utilize the three FPSOs through the end 2013, which will require more costly subsea completions (around \$50 million per well), as opposed to cheaper dry completions on the wellhead platform (which cost around \$20 million per well). We note that the modified development

plan should only enable OGX to production ramp production starting mid-2014, up to six months behind the previous plan.

The company's operating costs and capital spending trajectory has also risen above original expectations, due to the revised development plan discussed above, increased exploration spending, including spending in the pre-salt in the Santos Basin, higher than projected operating lease costs on its FPSOs, and costs incurred to buy out a 20% stake from Maersk's in blocks BM-C-37 and BM-C-38 in the Campos Basin, and become operator of the two blocks. As a result, greater cash flow deficits can be anticipated, even with a supportive oil price outlook benefiting operating cash flows.



OGX has recently revised its business plan, reducing its exploration capital spending in 2013 and 2014 by about \$2.1 billion, including reducing its drilling rig commitments to three rigs from six currently and reducing seismic spending. It is now concentrating on achieving operational targets. In the meantime there is a solid cash position of R\$ 5.9 billion, or US\$2.9 billion, to support exploration commitments, development and initial production into 2013, including US\$1.8 billion invested in offshore deposits and US\$1.1 billion raised through a bond issue in March 2012. The plans

to reduce the number of exploration rigs in 2013, reduce capital expenditures to about \$1.2 billion in 2013 from an expected \$2 billion this year. As part of the transition to the development phase, exploration expenditures are expected to naturally decline as a proportion of the total until 2014, when the planned capital expenditures of US\$0.8 billion is largely focused on production.

OGX's current B1 Moody's Corporate Family Rating is in general supported by the company's large, world scale resource base, which provides excellent reserves and production growth potential, energy sector experienced management team and board, and good liquidity position. Although, the rating is restrained by the company's still early stage development status, with only three wells producing and no proven reserves, large up-front capital spending, with high staging and execution risk, early stage small scale and concentrated production operations through the fourth quarter of 2013, and high front-end leverage, with lack of free cash flow until 2014. Moody's warned recently that OGX's B1 rating could be downgraded if "production levels decline, liquidity becomes constrained or debt levels materially rise in order to fund cash flow shortfalls".

After a highly successful exploration program we believe that substantial recoverable oil is in place, taking longer to develop does not necessarily reduce the value of the reserves. Besides, there is always an option to create greater shareholder value by accelerating the program—assuming there is *plenty more oil*, as Eike Batista has publically stated. In essence, OGX needs to prove to the market that they are not only the best at finding oil, but also can develop and execute on the strategies for producing oil and gas in profitable, commercial quantities over the long-term. At this stage many companies would consider farm-ins in order to obtain additional capital, operational capability and more importantly to offset some of the execution risk. This is beginning to feature in OGX's thinking. If they are to participate in further ANP bidding rounds then they would probably seek international partners a spokesperson said.

A Change at the Top

In April, 2012 OGX announced a new corporate structure and composition of its executive management, in line with the transition towards production of oil and gas in combination with their hereto highly successful exploration campaign.

Then days after the plunge in shares in June 2012, OGX announced that Luiz Carneiro would replace Paulo Mendonça, as CEO. Mendonça who had led OGX from its inception stays on as special adviser to Eike Batista, but has clearly been side-lined. Even so, it is almost certainly the right timing for a change in leadership, as OGX enters this new phase. Carneiro previously served as OSX's operations director; worked for more than 30 years at Petrobras and clearly has a stronger production focus.

Where to Now?

A curious aspect of OGX's strategy to date is the fact that they are nearly 100% operator of all their fields and have recently bought-out a 20% stake from Maersk's in some of the blocks in the Campos basin. Paulo Mendonça, the former CEO described the reasoning behind this approach—OGX is the first company that started in Brazil on its own, the majors entered Brazil with Petrobras. Brazil is not understood well by foreigners, and they do not understand the rules we work with, which is why most of the companies entered the market with Petrobras.

Apart from pride in ownership there is little business logic in this stance, given the current development and production challenges that OGX face. While it may have made sense during the exploration campaign to go it alone; now in order to monetize the discoveries already made, OGX will require capital and operating partners to achieve anything like its previously published (and almost certainly over-optimistic) production target of 1.4 million barrels per day of oil and gas by 2020.

In addition to operating partners, Eike Batista appears to be focused on obtaining equity from strategic investment partners. In March, ahead of the share price slide, he received an investment of \$2 billion from Mubadala, the Abu Dhabi sovereign fund, into the EBX Group.

While OGX has a solid potential resource base and a strong foundation for growth, it appears to lack a clear strategy to turn many of these numerous discoveries into commercial production. It would seem logical that OGX seek alliances to develop the full potential. The recent plunge in the share price should help make this more accessible in terms of price for potential partners farming-in to projects. It should also overcome the concerns of existing shareholders about an impact on share dilution. If OGX are going to develop anything like the 10.8 billion barrels of oil equivalent of prospective resources it has identified over the coming decade, it is going to need to attract a lot of partners and a lot of new investment will need to be raised. Moreover strong operating partners can help accelerate the program and ensure that targets get met. OGX may well have discovered a lot of oil and gas, but in time a good portion of the profits to be realized from development will probably accrue to bigger, more experienced partners.

Accordingly, prior to his departure Paulo Mendonça reportedly was seeking a partner to buy a minority stake in its most promising projects and claimed to be receiving plenty of interest from major oil companies.

Conclusions

It was naive to expect that OGX was somehow going to remain immune from the scrutiny of the market forever. There exist undoubtedly huge potential and strong indications that OGX will be successful—a world scale resource base, energy sector experienced management team and board, and a good liquidity position. However, there is still little tangible on which to base a full evaluation at this time—hence investors in some senses are placing bets on the upside. Early results have been seized upon and have taken-on disproportionate significance. Moreover, exploration companies like OGX, are notoriously high risk, volatile and will have erratic earnings during the early stages of development. OGX can only be properly assessed in the future, based on its long-term performance in consistently finding and producing oil and gas in profitable, commercial quantities.

Meanwhile, Eike Batista and OGX's management must accept the blame for their current predicament. It is an inevitable consequence of their hard sell, raising unrealistic expectations in the market with little substance to back it up. Even so, the share price debacle has had a positive side—it appears to have created a realignment of company objectives as part of the natural transition towards development and production. Consistent with this, there appears to be greater realism in target setting.

Valuing OGX without hard data is a complex task and should take into account:

- OGX, until recently was a pure play exploration company that has demonstrated its ability to out-perform the industry in discovering oil;
- OGX is a niche player, with a superior portfolio of development assets that is more accessible for development than its competitors in Brazil;
- However, most discoveries of oil and gas to date cannot yet be classified as commercial.
- It remains unclear what is the strategy to develop all of the finds; and
- OGX does not become a substantial producer until 2016/17 based upon its current go-italone strategy.

And in terms of strategy OGX can be considered at the cross-roads, it must decide between:

- a measured approach: selectively developing parts of its resource base organically, based upon its new production focus and more realistic strategies—largely going-it-alone; or
- aggressively seeking capital and operating partners to develop the full potential of the discoveries made, while diluting ownership.

These two scenarios are likely to play-out over the coming months as OGX revisits its strategic direction.

Investment in oil and gas has always carried with it a high degree of risk, and volatility. OGX is proving no exception to the rule. Steady nerves and a well-informed industry perspective are crucial to potential investor success. It is too early to write-off Eike Batista and OGX. In due course, as results become more concrete and strategies better defined, OGX should continue to outperform the market—with its strong management team and attractive growth profile. Therefore buying and holding OGX while the stock is low makes sense, assuming they continue to demonstrate the ability to bridge the gap between spending and cash flow or to raise the additional capital necessary for an expanded program.

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