

WHITE PAPER

How open company data was used to
uncover the powerful elite benefiting from
Myanmar's multi-billion dollar jade
industry

Hera Hussain, OpenCorporates, October 2015

Executive Summary

This month (October 2015), after a year-long investigation, Global Witness published a ground-breaking report revealing the network of military elites, US-sanctioned drug lords and crony companies controlling Myanmar's multi-billion dollar jade industry. Global Witness used open company data collected, collated and published by OpenCorporates as a critical tool to uncover a web of connections between companies and individuals, and to help substantiate interview information on the real owners of major jade businesses.

This research is an important case study on the importance of company data and identifiers as an indispensable tool in the fight against corruption. This white paper shows how not only was it critical that OpenCorporates had this information (much of the information was removed from the official register during the investigation), but that the fact that it was machine-readable data, available via an API (data service), and programmatically combinable with other data was essential to discover the hidden connections between the key actors and the jade industry. Global Witness was able to examine this data with the help of Open Knowledge.

Finally this white paper, makes recommendations about the collection and publishing of statutory company information as open data to facilitate the creation of a hostile environment for corruption by providing a rigorous framework for public scrutiny and due diligence. In this it builds on the methodology and principles behind the [Open Company Data Index](#) (produced by OpenCorporates in partnership with the World Bank), which ranks how countries around the world allow company registration information to be publicly accessible.

Introduction

“Hpkant is one of the most valuable places on earth because you can earn billions from a very small area... and yet only a small number of people are getting advantages.”

Community Leader, Kachin State



Credit: Binder.donedat, Flickr (CC BY-ND 2.0)

This month (October 2015), Global Witness, after a year-long investigation, released a ground-breaking report on the multi-billion dollar jade industry in Myanmar. The report identifies powerful military, government and narcotics players who are benefiting from Myanmar’s jade riches at the expense of the rest of the population.

Global Witness estimates that Myanmar’s jade industry may have been worth as much as US\$31 billion¹ in 2015 – equivalent to nearly half of Myanmar’s GDP and up to 46 times the government’s expenditure on health. If managed well, the industry could have a transformative impact on development, in one of South-East Asia’s poorest countries.

According to the Global Witness report, notorious figures from Myanmar’s military junta era are using a web of companies to benefit from one of the planet’s most precious gemstones. This poses a serious questions for reformers in the country and

¹Jade: Myanmar’s Big State Secret, Global Witness, October 2015. www.globalwitness.org/myanmarjade

their international partners, and depending on the use to which the money is put could threaten prospects of democracy and prosperity in the country.

According to World Economic Forum, corruption adds up to 10% to the total cost of doing business globally, and up to 25% to the cost of procurement contracts in developing countries². The World Bank's groundbreaking "Puppet Masters" report³ found that 70% of grand corruption cases used corporate structures to launder money.

The report has received wide coverage in the international media with mentions in [Wall Street Journal](#), [Guardian](#), [BBC](#), [New York Times](#), [Reuters](#), [Wired](#), [ABC](#), [AP](#), and [AFP](#). It has also been widely received in the [local press in Myanmar](#).

Open data as an essential component to the investigation

In 2014, Myanmar's government released a publicly accessible, online company register, published by Directorate of Investment and Company Administration (DICA). The company register published incorporation data, addresses, types of business and information on company directors and shareholders.

While this information was not available as data, still less as openly licensed data, the website *was* both free to access and contained a lot more information than many company registers, even in the developed world (for example, Delaware contains information on neither the directors nor the shareholders). Importantly the directors information included identity numbers (so-called NRC numbers) – which are essential to disambiguating references to people, particularly in a country where surnames are often not used, and where many have the same first names. Part-way through the investigation in 2014, key data on directors and shareholders was taken down by DICA, without any visible explanation. After this was raised with DICA, information on directors was reinstated in 2015, but shareholder details remain absent.

However, thanks to [OpenCorporates](#) Global Witness was able to not just still find the information, but even better, access this as structured data, allowing their investigators to do analysis, find connections between companies and influential individuals, and run data-mining algorithms.

[OpenCorporates](#) is the world's largest open database of company information, with data over 90 million companies in 105+ jurisdictions. This data is extracted from

² Clean Business Is Good Business: The Business Case against Corruption. World Economic Forum (2005), <http://www.weforum.org/pdf/paci/BusinessCaseAgainstCorruption.pdf>

³ Puppet Masters: How the corrupt use legal structures to hide stolen assets and what to do about it (2011), Stolen Asset Recovery Initiative, <https://star.worldbank.org/star/publication/puppet-masters>

authoritative public sources and then standardised to allow it to be queried, analysed, and combined with other data. In this investigation these were critical factors, as finding matches, commonalities and connections would not have been possible without access to the information as structured data. Sam Leon, a consultant from Open Knowledge, performed the corporate mapping and data analysis work which enabled Global Witness to use the data.

In its investigation, Global Witness had carried out over 400 interviews to dig into the jade industry, and the figures who benefit from it. The OpenCorporates database allowed the NGO to check the information provided by interviewees on links between particular jade companies and powerful individuals against director and shareholder data for the companies concerned. This helped allow the organisation to substantiate connections, and separate out rumours from facts which can be proven and published.

For example, to conduct the investigation, Global Witness had also collected names of around one hundred companies involved in the Myanmar jade industry from a variety of sources, both official and unofficial. It then used OpenCorporates' 'reconciliation API'⁴ to match the names of these companies to incorporation. There are two benefits to this – it allows different representations of the same company name to be matched to the same company, and it means that further data can be accessed.

In this case, it specifically meant that Global Witness could use the main OpenCorporates API to find the directors and shareholders associated with the companies and find not just matches to each other, but also to other datasets (e.g. sanctions lists, prominent persons, etc). The fact that directors were required to list their NRC numbers was particularly important, as links could then be found between companies, as well as providing a mini dataset to be queried. Having them as data, also meant that queries could be constructed that searched for NRC numbers and names that were one or two characters away – inevitably there will always be some such 'bad data' in any such dataset.

"We were doing an investigation of jade, the murkiest and most valuable national resource in Myanmar. The availability of OpenCorporates data helped us to substantiate interview information on links between individuals and jade companies. In a country where many people have the same names and where surnames are often not used, having access to unique identifiers such as NRC numbers is crucial to proving connections ... without this kind of public data, there will always remain a shield for the elite to hide behind."

Juman Kubba, Global Witness

This shows the power of data to deal with complexity and ambiguity – indeed the all modern web applications, smart-phones apps are derived from access to data, and the potential that brings. While this is nice to have when searching for books you might want to read, it is vital when tackling corruption.

⁴ The reconciliation API allows a tool called OpenRefine to be used to match company names to actual companies, allowing messy names to be cleaned up <http://api.opencorporates.com/documentation/Open-Refine-Reconciliation-API>

OpenCorporates has taken an active role in the campaign for public beneficial ownership registers, and in partnership with the World Bank maintains the [Open Company Data Index](#), which benchmarks company registers on access to their data. Myanmar ranks low on the corporate transparency scale - scoring only a 30 out of 100 due to the lack of the information being available as data (even though it is natively stored as data) and the lack of an open licence on the register.

“In today’s complex, connected, corporate world – it’s essential that we should have the ability to understand companies. Global Witness’s superb investigation of OpenCorporates’ data shows just how vital it such data is, not just for journalists, law enforcement and other companies, but also for for NGOs and anti-corruption investigators.

Chris Taggart, OpenCorporates

Promoting open data for accountability

According to Global Witness, the connections of state, military and drug lords to the lucrative and secretive jade industry has been like an open secret but before now, it’s been difficult to substantiate these connections with data. This treasure trove of open company data in OpenCorporates enabled Global Witness to shine a light on the abuse of power and corruption in Myanmar’s jade industry.

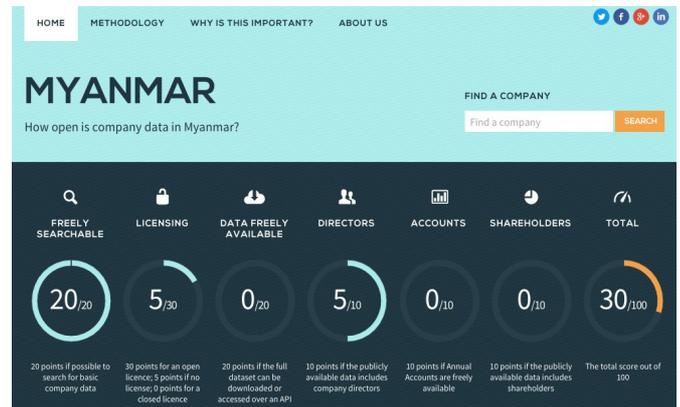
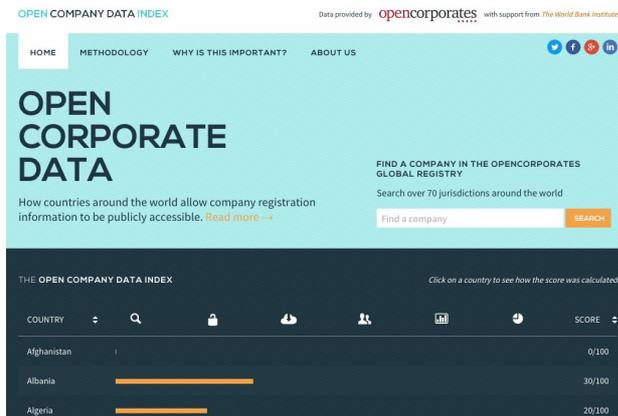
This was achieved through the expertise of OpenCorporates in converting the web pages on the Myanmar company register into structured data, and Global Witness’s increasing skills in using data science to use this data to find and expose the connections.

However, such skills are uncommon in NGOs, and extracting structured data from web pages is slow, time consuming, and has intrinsic difficulties (web pages change, or key data disappears, or registers put technical measures in place to avoid their data being freely combined with other data).

That’s why we believe that company registers must as a matter of course publish all the data within them as open data – reducing the barriers to reuse of the data, and not just providing a hostile environment to corruption, but also a sound basis for both effective markets and an informed, active, functioning democracy. Open access to company data helps also businesses mitigate risks, reduce costs, and improves operational efficiency. Additionally, it provides a framework for public audit and improves accountability by increasing the cost of criminal behaviour.

In order to measure how these ideals, OpenCorporates has been publishing the **Open Company Data Index** in partnership with the World Bank. This scores company registers on the **following methodology**:

1. **Unrestricted online search** Can you search for companies without charge or registration?
2. **Openly licensed** Is there an explicit open licence that allows reuse – essential to combine with other data?
3. **Free machine-readable data** Can freely you access as data?
4. **Data Depth** Is there detailed data about the company to allow a full understanding to be gained, specifically directors, annual accounts, shareholders



In light of the moves by the UK and others’ commitment to publish beneficial ownership as open data there is also a strong argument for adding that to the metric.

We think this investigation is a strong example of the power of such data to identify corruption and other criminal activity, and the international donors have an important role here – how many of those in power would have opposed the publication of the register if they knew that it could have been used by Global Witness and OpenCorporates to uncover their activities, and would this have come to light sooner had Myanmar published the information as open data from the start?

About OpenCorporates

OpenCorporates is the world’s largest open database of company information, with data over 90 million companies in 105+ jurisdictions. This data is extracted from authoritative public sources and then standardised to allow it to be queried, analysed, and combined with other data.

OpenCorporates has taken an active role in the campaign for public beneficial ownership registers. In addition, its pioneering work on corporate networks and on a

proof-of-concept Beneficial Ownership register ([WhoControlsIt](#)) give it proven expertise in the anti-corruption and beneficial ownership space.

OpenCorporates' innovative sustainability model makes the underlying data freely available to all provided the resulting product is also made available under the same Share-Alike Attribution terms. This allows the data to be used by citizens, journalists, investigators and civil society free of cost, but allows a revenue-model for commercial clients who are able to pay for it, including clients such as LinkedIn, Bureau van Dijk, and the US Government. The social impact of OpenCorporates is documented in the [Impact Report for 2014](#).

OpenCorporates is part of the Publish What You Pay network, [Financial Transparency Coalition](#) and B2O Anti-Corruption Working Group, and its CEO Chris Taggart is a board director of the [Global Legal Entity Identifier Foundation](#).

OpenCorporates' hybrid public-benefit business model has also made it a beacon for such open data companies, and was earlier this year recognised in this pioneering work with the award of the [Best Open Data Business](#) by the [Open Data Institute](#).

Conclusion

Open company data was just one part of Global Witness's extensive and long-running investigation. However, open company data was vitally important in making the investigation possible, in at least 3 core areas:

- confirming local leads (because OpenCorporates' source was the official data itself), providing a reliable, persistent store of official data even though it was at the time of the investigation no longer available on the official website;
- allowing data to be matched to companies, and then to directors and shareholders, thus providing an extended network, surfacing connections that wouldn't have been possible otherwise; and
- using the identifiers to match between multiple potential candidates – providing an effective signal-noise ratio, lowering the barriers to identifying potential corruption by avoiding bad matches and surfacing good ones.

Without the access to the Myanmar data directors and shareholders (particularly the identifiers) that OpenCorporates provided, Global Witness would have faced serious challenges in finding this information and matching companies to individuals would have taken significantly longer, and in some case may not have been possible.

Recommendations

We believe that this White Paper shows the power of open company data and the potential for it to create a hostile environment for corruption by providing a rigorous framework for public scrutiny and due diligence, lowering the barriers to identifying corruption, and increase the risks and costs of corruption.

Given that it also provides a better business environment, encourages corporate transparency, and lowers the cost of doing business we recommend that open company data should quickly become the default situation and should be a core resource for NGOs and anti-corruption investigators. We believe there are several key levers for making this happen, particularly given that large sums have been made available by international donors in the areas of corporate development, integrity and anti-corruption. In addition, a number of multilateral organisations such as the EU, IFC, World Bank, EBRD have committed funds for improvements or digitisation of company registers.

To that end we recommend:

- Corporate registers should be required to collect and publish digitally sufficiently detailed data to create a transparent, sound business environment and allow anti-corruption investigations to be carried out with few if any barriers. This information is critical for building corporate structures and understanding who truly benefits from a business.
- International funding for development in anti-corruption, corporate integrity, corporate development or similar should be tied to a requirement that company data is freely and publicly available as open data. Without this the foundations of such work risk being on shaky foundations.
- Capacity should be built within local and international NGOs that allows the sort of data science work that Global Witness carried out to be performed by other NGOs.
- International norms such as those of FATF/OECD should recognize that the lack of detailed open company data in a jurisdiction is a significant risk factor when assessing potential for corruption and criminal activity.

The Global Witness Myanmar Jade report

This can be downloaded from www.globalwitness.org/myanmarjade

More information

OpenCorporates: info@OpenCorporates.com, [@OpenCorporates](https://twitter.com/OpenCorporates) on Twitter.

Global Witness: <http://globalwitness.org>

Open Knowledge: <https://okfn.org>, [@OKFN](https://twitter.com/OKFN) on Twitter.

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