UK Challenger Banks' Market Cools Down in Recession – Conditions and Scenarios

Svyatoslav Gnevko
Financial Botanik

This research and analysis provide an insight into the pre-Corona Crisis UK's overall economic conditions and their impact on the UK Challenger Banks' financial strength, profitability, brand value, customer base and services.

Keywords: Bank of England (BoE), Brexit, Capital Adequacy, Minimum Requirement for Own Funds and Eligible Liabilities (MREL), Payments Services Directive (PSD), London Inter-Bank Offered Rate (LIBOR), challenger banks, competition, compliance, recession, regulation, European Central Bank (ECB), Financial Conduct Authority (FCA), Prudential Regulation Authority (PRA), risk management, brand awareness, brand equity, brand value, times revenue, net operating loss, discounted cash-flow, earnings multiplier, economic value, FinTech, RegTech, Metro Bank, Monzo, N26, Revolut, Starling, Tandem, Marcus (Goldman Sachs)

INTRODUCTION

Reading economic forecasts that UK will enter recession sooner, rather than later, I wondered whether the UK Challenger Banks have robust proposition (services' portfolio) and are sufficiently capitalised, i.e. keep their gearing in check, to weather the cooled down economic climate.

I've carried out a high-level scan of a number of UK-operating challenger banks and financial services providers' public profiles (products/services) across a number of criteria, such as:

- Part 1: Statutory compliance: e.g. checks and tests by Bank of England (BoE) and/or Financial Conduct Authority (FCA), any special requirements for financial services providers in this sector;
- Part 2:
  - Part 2a - Brand value: to what extent a brand value is likely to provide an advantage in a cooling down economy?
  - Part 2b: Financial strength and capitalisation: various data on actual and projected capitalisation, degree of gearing, etc.;
- Part 3: Number of customers: strength in numbers?
- Number and variety of products / services: does diversification offer a safety cushion or specialisation in a particular product line offer enough depth to weather a recession?

You may ask, why bother, they go down and then recover, so what? The answer is: picking undervalued stock in the bear market, if it is available to private investors, of course, in expectation of its rising value in the next spiral-turn of economic growth. The trick is not to invest into a company that will

dive and never duck back out! Or, to prepare for recession, which bank is a safer option for us as private and corporate customers.

PART 1: REGULATORY ENVIRONMENT

Statutory Compliance

Leaving aside the question about BoE stress-testing, none of the challengers are yet big enough to have systemic impact on the UK financial industry's stability.

Capital Requirements

Well, you would be relieved to know that since 2017 Prudential Regulation Authority (PRA) has been easing its "approach to Pillar 2A capital, a rule regarding the add-ons of capital which individual banks must set aside above sector-wide minimums" with specific application to mortgage services. A more individual approach, as opposed to the regulator's standardised model, now takes into account the depth of the risk data and operational experience to calibrate the capital add-ons. Privilege of using bespoke models was previously a competitive advantage of larger incumbent banks. Now your challenger mortgage provider competes in a more levelled competitive field.

MREL

However, FCA 'giveth' and BoE 'taketh': whilst being generous with more than a dozen new banking licences by Q3 2019, BoE has a fairly new requirement for "minimum requirement for own funds and eligible liabilities" (MREL) to maintain sufficient equity and debt resources that can absorb losses and provide for recapitalisation in resolution by the banks with assets over £15 billion. This threshold is significantly lower compared to the US ($250 billion) and the Eurozone (€100 billion). In the UK, MREL rules are more stringent than the US and the Eurozone meaning the qualifying UK challenger banks are obligated to keep large amounts of expensive equity and debt.

Product Offerings Limited by Regulation

It also appears that "ringfencing" rules (the rules apply to any UK bank with more than £25 billion in customer deposits) have damaged the challenger banks' competitive edge in the market for certain types of corporate services, as such services can only be provided by a 'non-ringfenced' UK bank.

And, finally, Brexit (transition period of 11 months starting now) in combination with Payments Services Directive (PSD) by European Central Bank (ECB) somewhat complicates a cross-border product / service proposition with mandatory passporting regime for the UK-licenced financial services providers. Eurozone financial products' passporting is yet another competitive hurdle to overcome for a number of challengers, but to a lesser degree for the EU-headquartered or the ones with subsidiaries in the Eurozone countries: N26 (Austria, France, Germany, Italy and Spain), Monese (Germany), Bunq (€ Travel Card), Revolut (over 150 currencies' multi-spend and money transfer card), etc.

Accounting Standards and Disclosure

It is assumed that all UK deposit taking challenger banks prepare their financial accounts using IFRS 9 Financial Instruments - the current UK accounting standard for banks. There shouldn't be any advantage or disadvantage in the playing field as all financial reports will adhere to the same accounting standard.

Before Brexit, the UK Financial Institutions have been subjected to the European Union Capital Requirements Directive (CRD) and Capital Requirements Regulations (CRR) implemented on 1 January 2014. The CRR and CRD, commonly known as CRD IV, which provide consistent capital adequacy standards for financial services companies and an associated supervisory framework across the European Union are enforced in the UK by the Prudential Regulation Authority (PRA). It may appear that upon the

completion of the eleven months' Brexit transition period on 31 December 2020, PRA might have made the above regulations more stringent and robust. Watch this space.

Other best practice standards and disclosure requirements include, but are not limited to:

- Assessing and is closing of Credit Risk Exposure, including Counterparty, using for example Basic, Standardised or Advanced Approaches. Based on the availability of their own data, Standardised Approach is typical for challenger banks. Note: Credit risk is the risk of financial loss to the bank if a customer, or counterparty to a financial instrument, fails to meet its contractual obligations, and arises principally from the Bank's receivables from customers. The risk of financial loss from the Bank's exposures to other financial institutions and investment securities is reported as counterparty credit risk;
- Assessment, Rating and Reporting of Liquid Assets;
- Assessing and disclosing of Interest Rate Risk in the Banking Book (IRRBB);
- Calculating and reporting on Risk Weighted Exposure Amounts and Operational Risk Capital;
- Adoption of a specific and well-defined risk framework, such as Enterprise Risk Management Framework (ERMF), approved by PRA and FCA, including:
    - Measuring and reporting on Operational Risk. Note: The Risk that failures arising from inadequate or failed internal processes, people and systems or from external events that may cause monetary loss, service disruption or customer detriment;
    - Measuring and reporting on Market Risk. Note: The risk that changes in market rates negatively impact the earnings or market value of the Bank's assets or liabilities, income or costs;
    - Brexit Risk, i.e. exposure to detrimental effects of Brexit on the economy and the FIs is notably present in some of the UK challenger banks' Annual and Pillar 3 Reports. Interesting to see how the challenger sector deals with this risk during the eleven months transition period.

What is the importance of imposing all of the above on non-systemically important challenger banks? The answer can be demonstrated within the following example:

In January 2019 Metro Bank admitted to making an accounting error by underestimating the risks taken on commercial real estate loans by £900 million ($1.2 billion). Another finding by BoE's audit was that Metro Bank's real estate loan risk was 50% greater than previously reported. Specifically, Metro Bank gave some real estate loans a 35% risk weighting when the weighting should have been 100%, underestimating the risks taken on some loans by 65%. The incident and potential effect of the above error was compared by international market analysts and investors to some practices that triggered the events of Financial Crisis of 2008.

It is out of the question that Metro Bank would have collapsed the market in 2019 due to its non-systemic importance within the UK financial system. But the example serves as a warning that in pursuit of market share and faster growth, accounting standards, risk practices / calculations and disclosure should be under constant scrutiny. I assume that the BoE may have audited the books of other UK challenger banks. If not, assuming they all may theoretically have had 'accounting errors' and inadequate credit risk exposure calculators, their combined UK books might have caused substantial distress in the event of severe and/or prolonged recession.

Part 1: In Conclusion

In summary, some concessions in certain product types (mortgages) help with offering cheaper competitive products by the challenger banks. On the other hand, they have to comply with very expensive capital adequacy requirements, i.e. keep low-performing reserves. In addition, the challenger banks, because they lack non ring-fenced status, cannot enter the market for some lucrative, highly-risky, but also highly profitable service propositions to large corporates.

Whether transition from London Inter-Bank Offered Rate (LIBOR) in the loan market to risk-free interest rate benchmarks (FCA publications) by end-2021 will impair the challenger bank's competitiveness, needs to be seen. However, I assume it will boost it.

None of the existing Challenger Banks have been identified as having any global or domestic UK systemic importance; assuming that statutory compliance requirements, accounting standards and mandatory disclosure rules are adhered to, any threat from the segment of the challenger banks can be considered minimal even in the event of severe recession.

There is a possible scenario that in the event of any of the UK challenger banks becoming financially or statutory compliance vulnerable, they may become a target of a friendly or hostile acquisition attempt by the current incumbents. Example: persistent rumours of a potential bid from Lloyds Banking Group for somewhat 'vulnerable' Metro Bank. Watch this space.

PART 2A: BRAND AWARENESS, EQUITY AND VALUE

Part 2A: Introduction

Reading economic forecasts that UK will enter recession sooner, rather than later, I wondered whether the UK Challenger Banks have robust proposition (services' portfolio) and are sufficiently capitalised, i.e. keep their gearing in check, to weather the cooled down economic climate. If you are interested in my snap-shot economic forecast for 2020 read the blog here.

Would you pick a bank as your services provider or pick their stock as an investor if the bank in question has problems with regulatory compliance, a weak balance sheet or a recognisable, but overvalued brand (e.g. a brand can be valued and feature as an 'intangible asset' on the balance sheet)?

On the contrary, we all want to bank with stable, respectable financial institutions, which make our lives easier and manageable. There is a segment of customers, who also want their bank, products and attributes (e.g. real platinum, cobalt, titanium credit card, 'fantastic plastic' is not trendy anymore) to be cool and fashionable.

With Challenger Banks we look for services with a difference: super-fast account opening, fast approvals of overdrafts and loans, multicurrency accounts and cards, aggregation of all our accounts' balances (across all our service providers) into a (near) real-time consolidated view, lower charges, itemised statements by spending categories (e.g. entertainment, travel, etc.) and, for some people, status and luxury with premium services.

But some of the above services may only be sustainable, i.e. designed, offered and operated by banks in a fast-growing economy with sufficient balances on clients' accounts and possibility for aggressive cross-selling of auxiliary products that boost the bank's revenue and profitability margins.

Impact of Economic Slowdown or Recession

In a recession, the ability to offer cheaper than the high street banks' services and additional features may become an overhead. The cost of services can be further negatively augmented with one of the following factors:

- Drying up or increasing cost of various funding sources: injections into shareholders' equity, venture capital, crowdfunding, ability to run Initial Public Offerings (IPO) and/or recurrent funding rounds;
- Potential decline in the clients' disposable income or no income at all (e.g. rising unemployment);
- Interbank borrowing to finance consumer and commercial loans, mortgages may become more expensive and subject to tighter risk weighting (Counterparty Credit Risk management see Part 1 for definition);
- Tightening of risk weightings for various consumer and commercial debt (stringent management of Credit Risk exposure, see Part 1 for definition) may lead to the unavailability of cheap consumer credit (overdrafts, credit card debt) and commercial borrowing (corporate

credit cards, business development loans and/or loans for business expansion (e.g. investment into fixed assets, stock / inventory, operational expenditure, various acquisitions, etc.).

Brand Value and Equity

In discussion on "brand equity" it's essential to refer to definitions of a product and a brand. P. Doyle defines a product *"is anything which meets the functional needs of customers"*.

The American Marketing Association, Marketing Definitions: A Glossary of Marketing Terms defines a brand as follows *"is a name, term, sign, symbol, or design, or a combination of them, intended to identify the goods or service of one seller or group of sellers and to differentiate them from those of competitors"*.

Dictionary of Banking and Finance, Peter Collin Publishing defines equity as *"is the value of a company which is the property of its shareholders (the company's assets less its liabilities, not including the ordinary share capital)"*. Hence, any more or less successful brand, being an asset, could be sold or acquired for legal tender, i.e. may have monetary value determined by a number of criteria. For example, D. Aaker suggests the following criteria (common attributes) as: brand loyalty, name awareness, perceived quality, strong brand associations and other assets (e.g. trademarks).

Facts and Stats on Selected Challenger Banks' Brands

For the purpose of the current discussion, I conclude that a number of challenger banks and financial services providers have succeeded in building recognizable UK brand names, here are some facts and stats:

- Part of my analysis is a test of transparency, disclosure and/or availability of primary financial information without resorting to advanced facilities and methods, such as subscription to an Annual Reports' service, a dedicated request to a challenger bank. Some of the surveyed challenger banks passed the test with high colours, some make their financials hard to get. A confident organisation that builds a solid brand will always choose a transparent mode of communicating its financial and operational achievements, or I am in a minority naïve group here?
- All challenger banks offer a MasterCard as an attribute of their accounts. I guess this is another testament to the incumbent role of MasterCard in the UK payments and cards transaction processing market – they service the UK challenger banks' niche.
- UK challenger banks offer Apple Pay and Google Pay for payments in stores, online and an in-app.

Monzo Bank

In their Annual Report 2019, Monzo Bank estimate that only 43% of their potential UK customers are aware of their brand. With circa 2 million UK users Monzo ventured into the US market with the injection of capital from Y Combinator Continuity, a Silicon Valley "start-up accelerator" (Dropbox and Airbnb already in their portfolio). Monzo's 2019 Annual Report does not provide any information on the level of their intangible assets or any other indication on the value of the brand equity. Success in the US may substantially improve the brand awareness and its value in the UK; equally, a failure may damage the financial and marketing positioning and market capitalisation. Watch this space.

Metro Bank

Metro Bank is probably the most established and recognizable brand among the challenger banks. It is the longest in operation and listed. The 2018 Annual Report claims 86% brand recognition in London and 54% across the UK. As a testament of their brand and service quality recognition they use the results of an independent survey of 16 largest personal current account providers (Metro shares the 1st place with First Direct) scoring 82%. Amongst 14 largest business current account providers, Metro comes 2nd after Handelsbanken (with 85%) at 69%. In the same period the Intangible Assets (assets closely related by definition to the brand equity) had grown by circa £70m to a total of £197m.

However, popularity among customers, existing and potential, and capitalization of investment into brand-related assets did not reflect itself in the share price in 2018, it reportedly fell from £35.84 to £16.93 or by 47%. Admittedly, Metro's accounting error that we examined in Part 1 negatively impacted market confidence and the share price / market capitalization.

N26

N26 brand differentiator is 'the world's first global digital bank'. The proposition is a testament of Nordic efficiency: three-tier current account product with a MasterCard: Current Account (vanilla), N26 You and Metal (Premium account with frills).

I've abandoned attempts to find an equivalent of an Annual Report. It is not provided on the company site or easily obtained from the internet. N26 under its licence answers to BaFin, the German Financial Services Regulator, which already advised the bank to pay attention to their engineering and outsourcing side of operations.

So, no comment on N26 brand recognition or valuation from the UK potential clients' perspective; let's hope I'll dig out some financials for the coming Part 2b: Financial Stability.

Starling Bank

Starling Bank, similar to Metro, has not yet branched out outside the UK market. This in itself is a testament of dedication to the UK client base and statement of Britishness. I got this impression when reading through the 2017-18 Annual Report and 2019 Pillar 3 Report: detailed financial statements, full disclosure of Risk Frameworks, Risk Appetite and Risk Management Processes and matter-of-fact approach towards the capitalisation of 'brand, domain and website'. The above together with 'banking software' are included under the Intangible Assets at net book value of £13.2m.

Starling's brand positioning is very similar to its closest competitors with prominent features such as 'no physical branches' (Metro's differentiator is that they have branches in addition to the 'digital'), 'current account is run entirely from a mobile phone app', 'cost reducer' and 'agile in its evolution of technology'. Plans for running 'crypto' proposition may become a differentiator, but the crypto-space is still relatively 'raw' from the regulators' viewpoint. With a view of 'breaking even' by the end of 2021, adding the 'crypto' Research & Development (R&D) and compliance spend to the existing regulatory / mandatory portfolio may be a questionable attempt for competitive advantage in low margin stagnated / recession market. But as they say at horse racing or boxing totalisators: 'Someone may know something that we don't'. Watch this space.

Revolut

Revolut has built its reputation by offering personal (Standard, Premium and Metal) and business (Domestic and International payments) accounts with an elaborate MasterCard Interchange service, which is its trademark in the travel cards and foreign exchange services' market. Given the reported eight million plus customer base, Revolut's brand recognition can be considered as high.

Revolut's website does not provide any financial information and links to Annual Reports or any other disclosure documentation. The website does not point to any customer satisfaction or recognition surveys, which may be interpreted as follows:

- Revolut considers itself in a league of its own, sort of, not your ordinary personal or business account. Proposition may not be comparable; therefore, survey results may not be representative;
- Far ahead with eight million customer-base, no need to reconfirm the brand awareness;
- Revolut brand and product may be considered as an additional service to an existing client's banking services with another provider, i.e. not in competition, but a value-add.

Revolut's financial strength and stability will be examined in Part 2b.

Tandem Bank

Another UK-licenced bank, Tandem (formerly Harrods Bank Limited), has a straightforward proposition of personal Journey Credit Cards, Tandem branded Savings Products, Unsecured Personal Loans and aggregation services.

The website gives an impression of a community or co-operative digital bank featuring a blog, brisk mention about its 700K customers [*Author's comment: there are several Tandem websites on the web, which are not entirely correlated. For example, Part 3 contains a revised customer number of c. 500K*] and a 'Contact Us' link for anything else. However, I was able to find its 2018 Annual Report and Financial Statements on the Companies House service.

Main branding theme is around increasing Tandem's offering in the personal lending domain with the focus on 'the Tandem App utilisation, as the cornerstone of the customer proposition'. Analysis of the 2018 Annual Report shows that the investment into Intangible Assets has dropped compared to the 2017 period, the valuation of this class of assets has declined from 210K in 2017 to 77K in 2018.

In comparison to other UK challenger banks these figures and the downward trend of investment into the brand indicate a weakening position in contention for the leading position. If we factor sluggish economic conditions (i.e. drying up investment capital injections) or a full-scale recession, such investment strategy may lead towards zero or negative growth in new business (customers) and shrinking market share.

Part 2A: Summary

In my view, there are three arch-groups of challenger banks, which no doubt compete with each other for venture capital investment and customers, but at the same time, may have different aspirations and objectives, namely:

1. Metro Bank Plc is already a listed, established player in the UK market and competes both with the incumbents and challenger banks, especially with Starling and Monzo;
2. Starling and Monzo have strong characteristics of having an aspiration for a UK independent brand and journey. On a smaller operational scale, they possess all characteristics of a traditional UK bank, but with distinctive orientation for digital, FinTech approach to running IT and Ops and drive for price-sensitive customer proposition. N26 has similar product proposition and operational attributes as the two above, but with the 'global' aspiration. In branding terms this may appeal to the expat and/or geographical nomad customer type, but may play a trick with appealing to a distinctively British client base;
3. Revolut and Tandem are almost in a league of their own with a distinct Card Services' background (and a former small Tandem's mortgage book, which is believed to have been divested). They gradually branch out into more traditional customer account, unsecured lending and payment services. Goes without saying that Revolut is the strongest of the two. As for competition with the above two arch-groups of challenger banks and the UK incumbents, both Revolut and Tandem have characteristics of an add-on financial services provider, rather than a main 'bank'. So, more effort on brand positioning and product mix is required on their part to change the status quo.

I plan to cover comparison of challenger banks by their brand value in a separate research paper. It is not practical to jump the 'brand value' gun now, because none of the challenger banks, with the exception of Metro Bank Plc, have yet had an Initial Public Offering (IPO) or even stabilized their operations to a point of 'break-even'.

It is to be discussed further whether brand recognition has variable shades of positive or negative awareness for certain players, but the 'challenger banking model' owes its existence and frequent references to the brand awareness and marketing campaigns of these organisations and to a large degree their image in the eyes of regulators, market analysist and press.

Regulator's stance plays a decisive role in influencing market analysts' valuations and public opinion; negative press can destroy the value of the brand and the overall market share in an instant. Given that a number of challenger banks operate with some degree of net operating losses, recovering from the severe

drops in valuation and market share may take years of profitable operation, which in the conditions of economic slowdown or recession may prove to be an unsurmountable task.

In my view it is premature to discuss the brand loyalty, because by admission of a number of challenger banks' clients, they still have their salary / pay check accounts (and linked mortgage and loan products) with one of the incumbent banks. Challenger banks still have a reputation of being providers of a secondary account, for example, for expenses and entertainment, second mortgage and loan (it is cheaper).

At the same time there are studies, stating the growing number of clients of certain generations, who choose challenger banks as their primary banking services providers. Therefore, there's no doubt that challenger bank-survivors of the next recession and financial crises, may take a more prominent place in the UK financial industry. Either as independent banks, or their brands may flourish if acquired by one of the larger incumbents.

PART 2B: FINANCIAL STRENGTH AND CAPITALISATION

Part 2B: Introduction

Last week of February 2020 started with news on the stagnation of the German economy, economic contraction forecast for Europe in Q3 2020 from 0.3% to 0.1% and forecasts for China's GDP growth down by a whole 1% in the coming year. If you are interested in my snap-shot economic forecast for 2020 read the blog here.

I immediately checked the barometer of the UK' financial sector dynamics: how are the UK Challenger Banks doing? Well, in February 2020 Revolut and Starling Bank had received additional funding through later stage VC rounds. Press and pundits are hinting on Revolut's staggering valuation; on paper, of course. So far, so good.

Strength of the brand as its potential to raise venture capital, attract new business and, finally, go for the Initial Public Offering (IPO) was discussed in Part 2a. Another way to demonstrate financial strength prior to an IPO is to get a valuation.

I've done a high-level scan of a number of UK-operating challenger banks to get a clearer view of their financial strength: actual and projected capitalisation, operational profit / loss, revenue / income, etc. But before we look at different methods and actual figures, let me take you down the memory lane ….

Shadows of dot.com Crisis

I like using examples from the dot.com / tech bubble crisis of 2000-2002. Let's see if I can draw parallels to the development and growth of the modern challenger banks and FinTech sectors.

Dot-com companies incurred net operating losses as they spent heavily on product development (code cutting, new ways of presenting services, harnessing new internet channels), advertising and promotions (further micro-segmentation of user and customer base) to harness network effects to build market share as fast as possible in an attempt to 'get big fast' (MotherNature.com's CEO Defends Dot-Coms' Get-Big-Fast Strategy).

The resulting services or products were often offered for free or at a discount with the expectation that they could build enough brand awareness to charge profitable rates for their services in the future.

Public and financial markets analysts had perceptions that traditional incumbent technology companies and banks will become obsolete if this 'grow big or get lost' tactic of dot.com companies succeeded. Hence, the period from approximately 1996 to 2000 experienced a surge in private and public funding of such enterprises.

The opposite of 'get big fast' is to build the business on a principle that Kirsch calls "micro niches" (Lessons of Survival, From the Dot-Com Attic), i.e. offering reasonably priced services and products that are both attractive to the clients and are profitable to a bank or FinTech. And this principle totally worked in the dot.com area; a number of companies, although losing in valuations and having to restructure their debentures, have survived and continued offering products. Some (or their products to be precise) survived, because they had been acquired before the crisis by the incumbents. In many cases the

valuations of such acquisitions on their owners' balance sheets plummeted and had to be adsorbed as losses.

I hope that you are already getting a feel for the parallels I am about to draw and probably can name a number of companies recently featured in the press with a description of 'struggling'?

Challenger Banks' Financial Strength

A number of challenger banks have already built a recognisable UK brand and, as Part 2a demonstrates, benefited from the tax regime to build intangible assets and capitalise the investment into Research & Development (R&D). In Part 1 we touched upon the compliance aspects to measure financial strength and resilience in resolution scenarios. It's evident that some means of testing financial and regulatory compliance for challenger banks are somewhat heavy-handed, i.e. impair their ability to grow faster and force them to keep large portions of compliance capital in low-profit instruments. Also, we concluded that none of the challengers are yet big enough to have systemic impact on the UK financial industry's stability.

However, there are financial stability, strength and health tests that can be applied almost universally, well, maybe with some correction on perceived consequences for shareholders, investors and customers depending on the economic sector. For example, inability to continue research and/or production of a life-saving drug has more dramatic consequences than a release of the next-generation gaming gismo.

What Challenger Banks' Valuations May Indicate?

The most common and recognisable method of 'determining the economic value of a whole business' is multiply the company's share price by its total number of shares outstanding, i.e. calculate its market capitalisation. However, this method can be applied to only one challenger bank on our list – Metro Bank. We discussed in Part 1 that due to accounting errors, regulatory audits and market scrutiny Metro Bank's valuation on 18 February 2020 is £441.40m (compared to its peak of £4.978bn on 16 March 2018).

It is obvious that the other challenger banks' valuations are not calculated using a 'Book value', which is the value of shareholders' equity of a business as shown on the balance sheet statement, i.e. derived by subtracting the total liabilities of a company from its total assets. If this method is used, multi-billion valuations as shown in the table below would have been impossible. Featured challenger banks, with the exception of Metro Bank, report operational losses.

I assume that 'Times Revenue' (for example, a so-called RegTech company may be valued at 3x its revenue) business valuation method might have been used as it is more straightforward than 'Earnings Multiplier' or 'Discounted Cash-Flow (DCF)' methods. The only reason I make such an assumption is because the last two methods 'adjust future profits against cash flow that could be invested at the current interest rate over the same period of time (DCF additionally takes inflation into consideration to calculate the present value)'. The challenger banks are still to break even or turn profit. I am curious what valuation methods practicing auditors would employ for the challenger banks, FinTechs and RegTechs.

TABLE 1
UK CHALLENGER BANKS' VALUATIONS AND FINANCIAL PERFORMANCE

	Profit / Loss	Revenue / Income	Funding	Investors	Latest round date
Revolut	Total losses in 2018: £33 million ($43 million), double from previous period	2018 revenues: £58.2 million ($70 million)	Later stage VC round: $500 million On 26 April 2018, according to Forbes, estimated valuation was $1.7 billion. With the latest round valuation may rise up to $5+ billion (no concrete figures yet).	25 venture capital investors	5 February 2020
Monzo Bank UK USA (in progress)	Total comprehensive loss, net of tax (FYE 28 February 2019): £47.2 million (£30.5 million in 2018)	On 28 Feb 2019 Net Operating Income: £9.1m (2018: £1.8m)	Following a £113 million round, raised its valuation to more than £2 billion (c. $2.5 billion).	General Catalyst, London-based Latitude and Y Combinator Continuity	25 June 2019 (information by PitchBook)
Starling Bank	Loss before Tax in 2018: £26.5m (2017: £11.6m)	Turnover in 2018: £5m (2017: £3.5m)	Later stage VC round: £60 million (c. $78.2 million). Total investment to date £323 million. Valuation not disclosed	Merian Global Investors and Harry McPike's JTC	10 February 2020
Metro Bank	In 2018 Statutory Profit before Tax: £40.6m (up 117% from £18.7m in 2017)	Total Income in 2018: £404.1m (up by 38% from 2017: £293.8)	Market Capitalisation: £441.40m	Listed	18 February 2020

	Profit / Loss	Revenue / Income	Funding	Investors	Latest round date
N26 Offices: Berlin, New York, Barcelona, Vienna and São Paolo Surrendering UK banking licence	Not known	Not known	Website announces $300 million in Series D funding and a further $170 million extension (total $470 million), bringing their valuation to $3.5 billion	27 private equity investors	18 July 2019 (information by PitchBook)
Tandem Bank	FYE 31 December 2018 Tandem Bank reported overall pre-tax operating loss of £13.7 million (2017: £10.4m)	2018 Revenue: £7.9m	According to Fintech Futures on 24 October 2019 total funds raised were $74.3 million. Valuation not disclosed	Route 66 Ventures Private equity investors	24 October 2019

Part 2B: Summary

Whilst I had been analysing the featured challenger banks' Annual Reports and various data, I hoped to find justification for estimated valuations. I believe to have succeeded, especially in finding the following common patterns:

- Rival UK Challenger Banks, with the exception of Metro Bank, follow each other very closely in their funding rounds;
- The estimated (on paper) valuations for Revolut and Monzo are more than 10x their reported revenues. I could not find any guidance on the industry best practice: are 3x, 5x or 10x reasonable basis for multiplication to arrive at future economic value;
- All featured UK Challenger Banks, with the exception of Metro Bank, incur Net Operating Losses (see above for the definition), despite some serious, as in the case of Revolut, increases in year-on-year revenues;
- Whilst I've been writing this part of the research, N26 announced its exit from the UK market. In the previous Part 2a I already hinted on the weakness of N26' product proposition and perceived low recognition of its brand in the UK market. Clearly, the management and investors decided that their investments will have a better rate of return in the continental Europe and the USA;
- Despite high Net Operating Losses, Revolut and Monzo are notably on a hiring spree and expansion into the US market, a strategy, which will most probably continue eroding their profitability margins;
- Starling Bank and Tandem Bank do not disclose any estimates of their valuations;
- As demonstrated in the analysis above, such valuations are highly speculative as the only confirmed figures are the total funding to date and their persisting Operating Losses. For example, "Despite losses doubling [Revolut] to £33 million ($43 million) in 2018 – even though revenue increased 354% the same year – the challenger went full steam ahead with its global expansion and major hiring spree in 2019." (note: borrowing additional £0.5 bn and receiving a $1 billion convertible loan from JP Morgan; and expecting a valuation of circa £5 bn). Basically, the company spends all incoming funds, makes in excess of 300% annual profit and still trades at a loss.

On the basis of the analysis I conclude that the contraction in the UK Challenger Banks' market is well underway and it will have the following consequences and impacts on the players and the investors:

- Maybe on the assumption that we close our eyes on the fact that to date some of the challenger banks have spent all VC funds and continuously incurred operational losses, analysts suggest that investors may buy a share on more than 1:10 basis in an IPO. And that is not for a company that produces, let's say a flying car (who would not want one?), but for a digital 'money-changer'. Such strategy might have succeeded in previous economic booms; somehow, I doubt the chances in the stagnating markets and chilling prospects of recession;
- It looks as if there is an optimal number of challenger banks in the UK market at this point of the financial and economic cycle. Competition is strong, but there seems to be enough business and VC funding to sustain their survival through Brexit and coming recession;
- It is almost certain that for a number of years entry into the UK Challenger Banks' market will remain rather difficult: prohibitively expensive (cost of Regulatory Capital, cost of Compliance), relative saturation of the market, new Government's policies on the 'economic levelling' and stabilisation of the post-Brexit trading balances and relationships;
- Despite turning Operating Losses, almost all players continue receiving VC funding. If the UK economy seriously nose-dives such funding may dry up or become financially ineffective in the challenger banking sector. It could be a single severe economic factor such as substantial drop in real GDP. Or a combination of economic and market conditions such as drop in real GDP, unemployment, write-offs of bad corporate debt, rise in the cost of lending and/or rising risk of lending in certain economic conditions;
- Challenger Banks, who are already or are about to be financially vulnerable, will most likely get acquired. That will explain such a relentless publicity on 'too-good-to-be-true' valuations, a probable PR exercise to get a higher offer.

In the final Part 3 I will analyse the strength and positioning of the UK Challenger Banks based on their product lines and customer numbers. Is there strength in numbers?

PART 3: PRODUCTS, CUSTOMERS – STRENGTH IN NUMBERS?

Part 3: Introduction

Since I started these series on the UK Challenger Banks, the world economy and stock markets took a hit from Coronavirus, when we thought that Brexit will be the most disruptive event of the decade. Even before the actual UK exit from the EU in December 2020, most of the European economies have issued corrections towards their economic growth forecasts. In anticipation of favourable rules on the EU banking services' passporting does the UK banking still look attractive to venture capitalists, FinTech start-ups and banks of varying business models?

The fact is, as in Part 2b: Financial strength and capitalisation, that despite turning net profit losses a number of challenger banks raised significant funding in the later stage venture capital (VC) rounds in 2019 and 2020. A year before Monzo and Revolut entered the US market. The UK challenger banks' market bid farewell to N26.

But before the last dime has been emptied from the closing N26 UK customers' accounts, there comes the news that the UK digital banking market may have a new entrant, the US' own giant - JP Morgan. JPMC, after its fiasco with digital bank Finn in 2018 in the US (with total of forty-seven thousand clients), prepares a launch of savings and loan products.

Is this an inspiration by the Goldman Sachs' Marcus (a UK retail banking licence) savings product? Marcus has been serving over two-hundred and fifty thousand customers, grossing more than $8 billion in UK deposits since its launch in 2018. Entry into the digital retail space by the two largest investment banks could be explained that savings accounts are a perfect source of cheap finance, where customers gat a 1.30% AER (Annual Equivalent Rate), which is significantly lower than 2.5% in the US. It is also one

of many strategies, building a deposit pool just under the UK "ringfencing" threshold of £25 billion in customer deposits (see Part 1), to fund their investment operations.

It looks that the UK challenger banks have serious competition from international banking giants, which have comparatively unlimited funding resources, significant processing power and economies of scope and scale in technology / software to keep their UK digital arms in operation.

What size of customer base and deposit pool allow specialised banks to stay competitive and profitable? And does a diversified product portfolio mix beat a low-cost mono-product proposition? In other words, can the UK challenger banks keep their growth rate in the emerging economic and competition conditions?

Products and Customers

It is rather difficult to come up with a radically new retail or corporate financial product range in the highly-regulated UK financial market. Difficult, but not impossible. For example, improving various parameters of customer experience may be perceived as adding intangible value. With the exception of super-wealthy clients, who are not price sensitive and may trade cost-effectiveness of a banking product for its gismo and fashion attributes, majority of clients will most probably opt for 'boring', but reliable and reasonably priced, if not free, banking service.

Well, apart from the hint by Monzo on introducing the account service fees in the near future, majority of the GBP accounts are still free, even for the corporates. There is a small charge for foreign currency accounts, but otherwise the fees are on the down low.

On the side of Foreign Exchange, it is difficult to beat Revolut on the cross-currency rates. Starling Bank and Monzo, in comparison, track Mastercard's foreign exchange rates, which are, for the use of a better expression, are the least competitive.

TABLE 2
UK CHALLENGER BANKS' PRODUCTS, CUSTOMER NUMBERS AND SIZE OF DEPOSITS

	Products	Features	Customers	Deposits
Revolut UK USA (launch pending)	Private Accounts: Standard, Premium and Metal Corporate multi-currency accounts: 28 currencies Mastercard debit	Money transfers & Payments Vaults Budgeting Cryptocurrency Apple Pay	10 million +	£40 billion + of transaction value (actual deposit base size is not available)
Monzo Bank UK USA (launch pending)	Private & Business A/C Savings A/C Cash ISA Overdrafts Loans Mastercard debit	Travel: no fees, charges on top of MasterCard's exchange rate Energy switching Bill splitting Get paid early	2 million	£461.8m
Starling Bank European launch pending the Irish banking services licence completion	Personal accounts Corporate accounts Personal / Business overdrafts and loans Money transfers	Personal Finance Marketplace Money Dashboard Starling Business Marketplace Banking as a Service	1.25 million accounts, incl. circa 100,000 business accounts	£1 billion +

	Products	Features	Customers	Deposits
Metro Bank	Private & Business A/C Savings A/C Overdrafts Loans Mastercard debit	Safe deposit box Private banking Apple Pay Google Pay	1.7 million (on 1 May 2019)	£14.48 billion
N26 - Surrendering UK banking licence Berlin, New York, Barcelona, Vienna, São Paolo	Used to offer private accounts (3 tiers) with a Mastercard	n/a	5 million +	n/a
Tandem Bank	Journey Credit card Fixed Saver A/C	n/a	c 500,000	£385.6m at 31 December 2018 (2017: £407.7m)
Marcus (Goldman Sachs)	Online Savings A/C (also a Joint A/C option available)	1.30% AER	250 thousand clients +	$8 billion +
Digital JPMC – in setup mode	Savings A/C Loan A/C	In setup mode	In setup mode	In setup mode

Without going deep into technical details Starling, Monzo and Revolut's mobile apps for personal and business banking are truly new generation, digital age front ends, which feature visibility across multiple currencies, aggregation of cash positions and itemisation of spend.

Starling Bank goes an extra mile with its API-based Banking-as-a-Service and Starling Business Marketplace. It is a great testament of investing the investors' money. The strategy to attract more business, build a larger deposit base and lend to the UK consumers and business is dependent on the availability of value-add features and unique set of products. There's still a question on what is the critical mass of customer accounts / deposits / loans to generate profits to up-turn the net profit losses, break even and eventually achieve a healthy return on investment.

Like MMA fighters before the bout, the leaders of the UK challenger banks make promising statements about their competitive edge, aspirations to gain more customers and increase of market share. Unfortunately, the market conditions are looking grim even for the incumbent banks with much healthier balance sheets and profit / loss books.

The 'play-offs' have already seen the N26 departure from the UK market. There's very little press about Tandem Bank's activities and expansion. Based on the previous performance and Tandem's recent inability to attract a planned funding, I'll make a cautious prediction that Tandem Bank's progression has stalled and may deteriorate further in the adverse economic conditions. And, finally, the pioneer of the UK challenger banks, Metro Bank considers a partial refund of its £120m Capability and Innovation funding as it struggles on a number of fronts, in particular: compliance and actual targets for lending to corporate clients in the current economic climate.

SUMMARY

In Part 1 we touched upon the compliance aspects to measure financial strength and resilience in resolution scenarios. It's evident that some means of testing financial and regulatory compliance for challenger banks are somewhat heavy-handed, i.e. impair their ability to grow faster and force them to keep large portions of compliance capital in low-profit instruments. Also, we concluded that none of the challengers are yet big enough to have systemic impact on the UK financial industry's stability.

A number of challenger banks have already built a recognisable UK brand and, as Part 2a demonstrates, benefited from the tax regime to build intangible assets and capitalise the investment into Research & Development (R&D).

Part 2b: Financial strength and capitalisation demonstrates that, despite turning net profit losses to date, a number of the UK challenger banks have completed successful VC funding rounds.

Raising of the additional VC funding and receiving of the Capability and Innovation funding (Starling, Metro and a number of smaller players) does not directly correlate to the increase in customer numbers, rise in deposits and increase in corporate lending, especially collateralised. If both consumer and corporate markets contract under the economic meltdown, the UK challenger banks' expansion may stall. Contraction in the challenger banks' niche may soften the blow a bit, but only under a condition that customers leaving N26, Metro and Tandem will take their business to other challengers and not to the incumbent banks.

Because there no reserves (remember: current situation with the net operational losses) the UK challenger banks will literally have to spend the funding on keeping the 'lights on' for a static or potentially decreasing customer base.

Because the corporate debt will deteriorate further in the declining economic climate, lending will become difficult and at certain point close to impossible to stay within the credit risk appetite parameters. There is a high probability that the UK Capability and Innovation funding targets are be missed, i.e. funds will be undrawn. There's also a possibility of losses due to bad debt at failing businesses.

I'd also like to note that if the UK Government continues with its policies preventing the development of the Small and Medium Enterprises (SMEs) and entrepreneurs, the UK challenger banks may also lose a substantial part of its personal and/or corporate clients' bases due to lack of business activity, dissolution, bankruptcy or exit from the UK jurisdiction.

The solution is obvious, although somewhat unpalatable for the UK Government and Treasury (populism will not work, if the economy nosedives):

- Protect jobs for the UK workforce;
- Promote legislation to stimulate the UK's private enterprise growth;
- Resist the temptation to excessively tax the UK's private businesses;
- Increase the UK's National Debt;
- Review and relax financial and regulatory compliance for challenger banks, FinTechs and RegTechs;
- Introduce tax holidays and free economic zones to attract foreign investment.