# The Greensill Supply Chain Finance collapse: a cautionary tale for Buy-Now-Pay-Later Schemes and their Regulators?

## Introduction

The collapse of the large Supply Chain Finance (SCF) operator Greensill into administration, triggered by its suppliers of funds cutting off funding, raises a question of whether similar risks may be faced by Buy-Now-Pay-Later (BNPL) schemes. For although the two activities may appear quite different, they rely on inherently similar business models. The key difference is that whereas Greensill facilitated deferred payment of obligations by a (too) small group of companies, BNPL operators enable deferred payment by many individuals.

## BNPL: Some Background

The emergence of BNPL schemes is a relatively recent phenomenon in Australia and internationally. In a standard BNPL arrangement a person purchasing goods from a participating merchant can defer payment of the purchase price. That amount is paid to the BNPL operator in instalments over a few weeks or months, with penalties applied for late payment. The merchant receives (at the time of purchase, or shortly thereafter) the purchase price less some discount (sometimes referred to as the merchant service fee). Some "BNPL" schemes operate via use of a credit card with specific repayment arrangements specified (possibly including an interest component).

ASIC's Report 672 provides a relatively recent (December 2020) overview of the industry which has grown in size since it emerged in 2016 to around 3.4 million transactions in December 2019 and $5.6 billion value of transactions in 2018-2019 (with Afterpay having 73 per cent of that total). They estimate around 6 million BNPL accounts in existence in Australia from the six BNPL providers they surveyed. Providers of BNPL services include: Afterpay; BrightePay; Bundll; Humm; Klarna; Latitude Pay; Laybuy; Openpay; Payright; Sezzle; Splitit; Zip Pay (and Zip Money). Canstar provides more detail on how each of these BNPL providers operate, and a recent article in the March 2021 Reserve Bank of Australia Bulletin provides more information on the industry.

## Greensill Supply Chain Finance: Some background

By way of background, Greensill bought trade credit IOUs of large companies from suppliers to those companies at a discount to face value, subsequently receiving payment of the face value from the issuer of the IOU. The "reverse factoring" model promoted by Greensill involved setting up an arrangement whereby the issuer of the IOUs advised suppliers that Greensill stood ready to buy those IOUs. The size of the discounts, and long maturities of the IOUs, raised concerns of exploitation of small suppliers to large companies who either had to face long waits for payment or sell the IOUs at large discounts).

Greensill funded this activity by a mix of equity, debt, and structured products which involved, essentially, selling its receivables (the IOUs) to investors. Bank loans, via warehouse facilities which enabled Greensill to access funds as required against the collateral of IOUs it had purchased, is one form of debt funding used. Another was structured products such as open-ended mutual funds managed by banks or fund managers. Greensill would (essentially) "package up" the IOUs it had purchased and on-sell as securities to the mutual fund. The mutual fund in turn was funded by issuing units to investors which gave them a pro-rata claim on the securities (representing the receivables (IOUs)) purchased by the fund. Being "open-ended", investors could buy or sell new units from the fund manager at (a small spread to) the net asset value (NAV) of the fund's assets. Credit Suisse and fund manager GAM provided Greensills with these funding opportunities.

Obviously, the assets of the mutual funds, were subject to credit risk from possible default by the issuers of the IOUs. Minimising such credit risk typically involves two approaches (in addition to only dealing with issuers of IOUs of the highest credit standing). One is diversification – not having a large concentration of IOUs from a single issuer (or its related parties). The second is by purchasing trade credit insurance from a reputable insurer, such that any default is covered by the insurance policy and the loss transferred to the insurer.

Greensill's problems can be partly traced to failures in both these risk management techniques. A large proportion of the IOUs it purchased were from large companies associated with one business. Second, and partly resulting from that concentration risk, Greensill's insurers refused to continue their underwriting role.

The triggers for Greensill's rapid demise were the decision of one bank (Credit Suisse) to freeze redemptions from the funds it operates, citing uncertainty around the valuation of assets. A second fund operator GAM decided to close the (approximately) $1 billion fund it operated. These actions cut the supply of funds to Greensill, and hence its ability to fund its activities and balance sheet.[1]

## The SCF-BNPL Similarity

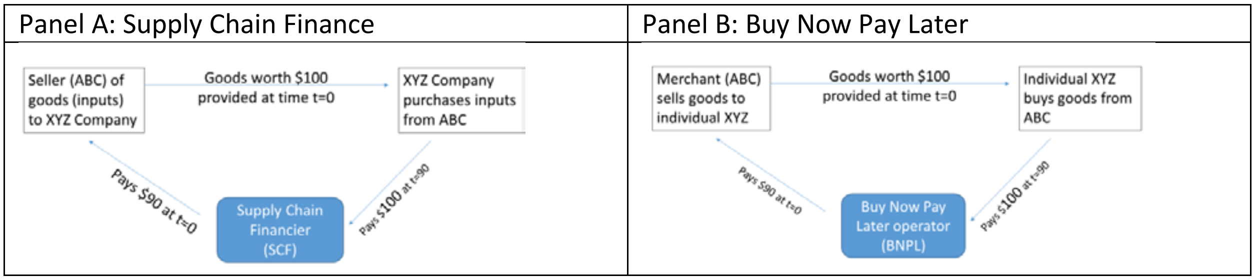
Greensill's failure was specific to its operations, deficiencies in risk management, and unsuitable funding arrangements. But could similar problems conceivably emerge for BNPL operators given the inherently similar business models used? While not currently appearing to be a problem, it is not possible to rule out evolution of funding models and risk-taking which could lead to concerns. Concentration risk (of over-exposure to a few issuers of IOUs as in the case of Greensill)) is unlikely to be a cause of concern. But increasing competition and a return to a higher interest rate environment could create problems for the viability of the business model.

The underlying similarity of the SCF and BNPL models is seen by illustrating the cash flows of each under a number of simplifying assumptions. (These include, for ease of illustration, assumptions of 90 day payment periods and discounts of 10 per cent in each case, although in practice those parameters differ).

Figure 1, Panel A provides a stylistic, highly simplified, example of the SCF operation. XYZ company purchases goods worth $100 from supplier ABC at date t = 0. Under its SCF arrangement of "reverse factoring" it provides an IOU to ABC promising to pay $100 in 90 days, and advises ABC that the IOU can be cashed immediately with SCF for $90. When this is done, SCF thus holds the IOU of XYZ and will be paid $100 by XYZ in 90 days. SCF has paid out $90 to ABC, using its own or borrowed funds, and will collect $100 from XYZ in 90 days.

[1] While Greensill's main focus was reverse factoring involving a company's trade debts arising from purchases of inputs, it appears that it also provided funding against the collateral of a company's trade credit receivables from sales made to customers. Apparently, this also involved providing funding against the potential collateral of not-yet-existing receivables which might result from future purchases by customers.

*Figure 1: SCF and BNPL Comparison*




Notably BNPL involves a similar structure of cash flows and financing as Panel B of Figure 1 illustrates. An individual (XYZ) buys goods worth $100 from a merchant (ABC) at time t=0. The individual (XYZ) elects to make use of the BNPL facility which means (a) that she will pay BNPL $100 in 90 days (t=90) and (b) the merchant (ABC) receives a discounted amount of $90 from BNPL at t = 0.

As can be seen by comparing the two panels of Figure 1, the arrangements are identical. The recipient of goods gets to defer payment of the full amount, while the provider of the goods receives a smaller discounted amount up-front from the SCF or BNPL intermediary. The intermediary aims to make profit via the $10 difference between paying $90 at date t=0 and being due to receive $100 at date t = 90. It does so if that difference exceeds its cost of funding the cash-flow timing difference plus its operating costs and any losses due to defaults on the amount it is owed.

Of course, there are numerous differences in the practical arrangements. BNPL is aimed at individuals purchasing goods while SCF is aimed at companies buying inputs (and otherwise using trade credit). The BNPL operator is likely to have many individuals owing it relatively small amounts of money, while the SCF operator will likely have a less diversified group of debtors owing larger sums. The payment arrangements will differ from the 90 days assumed in the simple example, and remedies for dealing with non-payment will differ. The discounts involved (amounts received by goods suppliers relative to the value of the goods involved) will differ between the two cases.

The approval processes and systems involved will differ. The Reverse Factoring model used in SCF is established by the purchaser of goods and requires all sellers to it to either hold its long dated IOUs or discount them with the SCF firm for immediate cash. The BNPL model involves a seller of goods having agreed with the BNPL operator to allow purchasers of goods to elect to use this form of deferred payment, rather than other payment methods. Where there are no additional costs for the purchaser (unless they a late making the deferred payment(s)), as in the AfterPay model, deferral of payment can be an attractive option to liquidity constrained purchasers wanting to make immediate purchase.

But none of these differences negates the fact that both SCF and BNPL are similar business models involving provision of deferred payments arrangements for purchasers of goods and relying on the difference between amounts paid to suppliers of goods and amounts paid later in time by purchasers of goods for their profitability. And importantly, each must access funding from somewhere in order to make payments to the suppliers before receiving payments from purchasers (as well as covering operating costs).

## Funding Options

Funding for SCF or BNPL operators can essentially come from three sources. One is the equity funding provided by the owners of the intermediary. A second is debt funding from issues of bonds or lines of credit (warehouse facilities) from banks. A third is via some form of securitization or related activity. In this last case, the receivables which are assets of the SCF or BNPL operator are packaged together and placed (sold) into some special purpose vehicle (SPV) which issues claims to investors against those assets. (This would involve some form of revolving finance facility under which maturing assets are replaced by new receivables). The SPV could be a form of mutual fund or securitization issuing tranches of asset backed notes. The SCF/BNPL operator thus receives cash and transfers the funding and, depending on the nature of the contracts involved, some default risk to investors.

Like any other financial intermediary, the availability and cost of non-equity funding will depend upon expected return and risk. Leverage (the size of the equity buffer to absorb losses) will matter. The quality of assets (default risk) will matter. Expected future revenue and operating costs and ability to generate cash flows sufficient to service debt will matter.

The problems of Greensill included the quality of assets (its receivables), withdrawal of insurance facilities, and unwillingness of banks and others to continue to provide finance secured against (or reliant on cash flows from) those assets. Problems of availability or cost of finance can also arise for BNPL operators if competition for business leads them to approve deferred payments to individuals who are not good credit risks – and this is recognized by suppliers of finance. Diversification across a large number of individuals reduces credit risk, but does not offset the consequences of shifting to a higher concentration of high risk individuals.

Rapid growth also brings another risk. Whereas in a steady state, cash outflows today to suppliers of goods are largely balanced by cash inflows of payments from past recipients of goods, the former exceed the latter in periods of fast growth. Thus there is a need for increasing funding, which if via debt rather than equity can raise concerns about excessive leverage. And historically rapid credit growth by intermediaries has been a “red flag” about the potential for future asset quality problems.

BNPL operators also face risks should interest rates rise, and competition for business is strong. Their revenue stream arises primarily from the discount to purchase price involved in payments made to merchants. Their cost of funding is the interest rate paid on borrowed funds which, reflecting the low interest rate environment, has been relatively low.

Should borrowing costs rise (either because of an increase in market rates or in credit spreads) it is not obvious that the discounts on payments to merchants can increase to compensate. A growing number of BNPL operators will likely inhibit market power of any individual operator and merchants may discontinue access of customers to BNPL facilities if the cost to them outweighs perceived benefits of increased patronage.

In hindsight, BNPL is a financial product particularly suited to a low interest rate environment and where credit spreads are relatively low. It has prospered as a result of that recent situation. Its likely prosperity in a higher interest rate world is less clear, and ensuring confidence in the quality of its receivables and thus credit spreads it faces is also critical.

## Regulatory Concerns

The Greensill failure should not provide any new lessons for regulators and supervisors other than a need to maintain vigilance about the emergence of well recognized problems in slightly different guises. Those problems include: high risk lending; excessive concentration risk by lenders; excessive leverage; unsuitable funding vehicles; adequate disclosure of risks; interconnections between financial institutions.

### Interconnections between financial institutions

The last of those appears to have been a significant issue in the Greensill case, where purchase of a small German bank by the Greensill group, and its subsequent activities, led to further problems. In the case of BNPL operators in Australia, links are emerging between various banks and BNPL operators. Good risk management by banks, and regulatory oversight of concentration risks, should ideally limit risks arising for banks, but the GFC era example of major problems in margin lending financing by Opes Prime and other entities should suggest caution. In those cases, the margin lenders were financed by banks using the same practice of securities lending agreements – which underpinned the offering of an unsuitable financial product (which was subsequently banned). When the margin lenders failed due to operational and other shortcomings, those banks found it politically and reputationally necessary to compensate customers of the margin lenders for losses incurred.

### Unsuitable Funding Vehicles

Currently, Australian BNPL operators do not appear to have been attracted to funding by way of structured products such as selling receivables into open ended mutual funds (a la Greensill). However, in a low interest rate environment, the potential exists for retail and other investors to be attracted to such funds which offer prospects of a higher yield than elsewhere available. (The higher possible yield arises from the fund continually buying short term receivables at a discount to their face value which is received a short time later at maturity).

There are (at least) three problems with such a model. One is the lack of a ready market for the assets should significant numbers of investors wish to exit – perhaps in response to concerns about asset quality. The lessons from the problems of mortgage and property funds in the early 1990s and then again in the GFC about the unsuitability of open-ended funds based on assets with illiquid markets have hopefully been well learnt – although whether the regulatory response of requiring some minimum holding of liquid assets is adequate has yet to be put to the test.

The second problem is that the supply of funding available to the BNPL operator from such vehicles is investor driven – and may not be well correlated with the level of business the BNPL operator is experiencing, and thus its demand for funding.

The third problem is that valuation of the assets in the fund (IOUs of BNPL customers) is inherently problematic. Historical experience with default rates may provide only limited guidance when the business grows and expands its offering to a wider range of customers.

Regulators should be alert to any attempts of BNPL operators to utilize such forms of unsuitable funding.

## High Risk/Unsuitable Lending

One of the anomalies of Australian regulation is that BNPL activities are not classed as lending or involving a credit product under the National Consumer Credit Protection Act. Thus they escape oversight under this legislation (but are able to be regulated as credit by ASIC under the ASIC Act). The reason for this anomaly is that BNPL does not involve charging of an interest rate to the individual customer. Rather, the arrangement enables the individual to defer payment. The cost of this deferral falls on the merchants supplying goods via them receiving an amount which is a discount to face value – with the discount sometimes referred to as the merchant service fee. If the individual does not meet the required repayments on schedule they are charged a fixed penalty fee, rather than an amount linked to the value outstanding or time involved.

Thus, because no "interest" is involved, BNPL is not classed as a credit product under Australian legislation. However, it does involve a deferred payment obligation – which would be a better definition of provision of credit to be incorporated into legislation. In principle the individual incurs a cost of using the deferred payment obligation by forgoing the possible discount which might be obtained from the merchant for a purchase using cash, or some other payment option, rather than BNPL. Currently, BNPL operators are allowed to enforce a no surcharge rule (which may limit the ability of merchants to offer cash discounts) and this is another regulatory issue which warrants addressing.

Because BNPL is not treated as a credit product, it escapes the regulatory oversight of responsible lending obligations. This suggests that a slide into higher risk activities and unsuitable lending in response to increasing competition (from bank "no-interest" credit cards or new entrants such as PayPal) is quite feasible. That, in turn, brings with it possible issues associated with methods of collection of amounts outstanding and consequences (including credit ratings) for the consumers involved.

## Conclusion

None of this is to say that individual BNPL operators are on a slippery slope! But the problems apparently causing the demise of Greensill should provide a cautionary reminder of the need for adequate disclosure, reliable sources of external funding, importance of asset quality control, and appropriate regulation.

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