Cash and Crises financial literacy series

'*Cash and Crises*' is a series of financial literacy audiographics brought to you by CashEssentials, a private sector initiative with a social mission to support the relief and development community in understanding how cash is managed for society in times of crisis.

Episode V
The Cash Cycle in Disasters

Let's start with a short reality check and look at the cash cycle and how physical currency is managed for society.

Most cash and voucher financial assistance programmes are implemented with banknotes somewhere in the 'cash cycle'. Recipients either cash-out their digital payments, trade their vouchers or collect physical currency in brown envelopes. As with the Ebola crisis in Sierra Leone in 2014 and in Democratic Republic of Congo now, much of this cash is ferried to the field in unprotected backpacks by aid workers on motorbikes — a risky and unnecessary activity [1].

What is the Cash Cycle?

The 'Cash Cycle' refers to the circulation of notes and coins between economic agents after they have been issued by the central bank or monetary authority and is not just about the mechanics of cash handling.

The Cash Cycle is an economic parameter in its own right. If it were to collapse, economic activity would slow significantly, or even stop altogether. Confidence in the stability and security of the cash cycle is essential to the proper functioning of the national economy, especially in times of crisis. A functioning cash cycle helps to maintain the ability of those affected by disaster to pay for essentials when the infrastructure of electronic payments has been disrupted or destroyed.

> ***"The sooner the Cash Cycle is restored after a catastrophe, the sooner economic recovery can begin."***
> World Bank, The Economics of Disaster
> 2016

Cash demand increases significantly following a natural disaster and remains higher than normal throughout the early recovery phase, often for six months or more. This is why many national disaster management agencies recommend households stockpile cash prior to onset. Recent experience from Typhoon Haiyan in the Philippines and Hurricane Maria in the Caribbean saw a tripling in demand, requiring daily injections of additional low-denomination currency. Even in Australia, an advanced economy, the disruption caused by devastating bushfires necessitated reversion to a cash economy.

> ***"Cash demand more than tripled after Typhoon Haiyan which meant we had to provide banknotes in bulk by air every day for weeks"***
> Illuminada Sicat, Assistant Governor
> Central Bank of The Philippines

[1] Hallegatte et al: The Economics of Natural Disasters - concepts and methods; Policy Research working paper ; no. WPS 5507, World Bank, 2010

The following actors are involved:

Central Banks have sole authorisation to issue physical currency. They are also responsible for ensuring that national cash cycles function properly, and for determining annual production volumes based on public demand.

Commercial Banks supply the economy with cash via their branches and ATMs, and receive deposits as well.

Cash management companies – more commonly known as 'cash-in-transit' or 'armoured trucking companies' – are responsible for the logistical elements of cash supply. They deliver and collect cash from commercial banks and retailers, and refill ATMs.

Cash Centres are where banknotes and coins are counted, packaged and inspected for authenticity and fitness, and where worn, damaged, or suspected counterfeit notes are withdrawn from circulation and returned to the central bank for destruction. They are run either by central banks or, if allowed, by commercial banks or cash management companies. Portable cash centres have been deployed in large-scale disaster response operations[2].

Merchants may also play a role in the distribution of cash either through agency banking agreements or through mechanisms such as cash-back or virtual ATMs.

Does the ATM play a significant role in the Cash Cycle following a disaster?

In mature economies, the ATM lies at the centre of the complex cash supply chain and plays an important role in a country's cash architecture

> ***"ATMs are central to our digital cash transfer planning, but we have limited knowledge of how they work, including their potential to add social value."***
>
> Director Cash Services, Norwegian Refugee Council
> January 2016

Experience from Pakistan in 2010, the Philippines in 2015 and the Caribbean in 2017 demonstrates that the rapid restoration of ATM services and temporary expansion of distribution capacity through mobile ATMs has not always been given the priority it deserves.

How much does cash cost?

> ***"In Europe, an average cash payment costs 24 cents, compared with 33 cents for a card transaction"***
>
> Deutsche Bundesbank
> 2019

Cash isn't free. Production, distribution and maintenance of the cash supply all incur costs. Various studies have shown that the overall cost of cash to society represents between 0.3 and 0.8% of GDP. However, the unit cost of a cash transaction is often lower than that of a card transaction, particularly for low-value transactions.

Apart from a host of other intangible cost-benefits[3], cash as a public good generates revenue for the state in the form of 'seigniorage'. Seigniorage is the difference between interest earned on the outstanding stock of cash and its cost of production.

[2] For example, during the Pakistan Floods of 2010

[3] Lepecq: 'Cash Essentials-Beyond Payments; AGIS Consulting, 2016 (Request a copy via contact@agis-consulting.com)

Summary

- The ‘Cash Cycle’ refers to the circulation of cash in the economy after it has been issued by the central bank.
- Trust in the robustness, efficiency and security of the cash cycle is essential to the proper functioning of the national economy.
- The sooner the Cash Cycle is restored after a catastrophe, the sooner economic recovery can begin.
- Cash demand increases enormously following a sudden-onset disaster, with the need for low-denomination notes remaining higher than normal for some time, usually months.
- Cash adds value to society by generating profit for the issuer.
- There seems to be a requirement to temporarily expand ATM channels following a disaster.
- Aid organisations should contract cash-in-transit operators for last-mile delivery, not carry cash themselves.

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