"The Long-Term Future of Cash"

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Summary

Impact of Global Credit Crunch on Payments, Including Cash

- Liquidity problem in global financial and money markets.
- Fall-out in financial services: bankruptcy, mergers, bail-outs on unprecedented scale, e.g. Lehman Brothers (bowing out after 158 years in business), Merrill Lynch (B of A), Bear Stearns (JP Morgan Chase), Fannie Mae and Freddie Mac (Federal Government) all highprofile causalities and Wall Street icons.
- Credit as a concept has been dealt a powerful blow what will long-term effects be on use
 of credit by consumers? Credit can easily become debt....
- Credit card use has slowed and both cash and debit use have increased in the wake of the credit crunch – will these become long-term trends?
- Payment trends do respond to economic and financial change, but how does one gain foresight about <u>long-term</u> future of cash?

Understanding the Rules of the Game of Futures Studies, Including Long-Range Forecasting

- Long Kondratieff Waves of Economic Growth and Technology Development have discernible and recurrent patterns.
- The span of technologies, drivers of social development, is typically generational and intergenerational.
- To generate foresight about any topic, you need hindsight (historical analysis) and insight (through current environment scans) as a basis.
- There is no foreknowledge of the future, but there can be knowledge about possible, probable, preferable and plausible futures.
- The brain naturally develops "memories of the future" by anticipating what could happen in the event of X occurring.
- Forecasts, which can be depicted in the form of scenarios, or "stories of the future", need to be based on underlying structural, systemic conditions ("pre-conditions" and change processes), which can be causal in creating likely impacts, to be credible.
- What are key branching points of the future?

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- Do not neglect wildcards which create uncertainty, or potential discontinuities/trendbreakers.
- The future can be anticipated and "colonized" so explore emerging future landscapes with intent.
- There is not one single future but an open range of futures and possibilities.
- Avoid at all costs your "default" future.

Historical Perspective on Cash

- Cash is one of humanity's most successful ever technologies.
- Cash spans 27 centuries.
- Coins are mentioned in the Bible.
- The first attempt to substitute cash was the invention in the 15th century of paper checks in the Netherlands.
- So far, all attempts to replace cash have failed why?

The Drivers of Cash Demand

- Cash has unique and durable qualities, including being "human-friendly":
 - ✓ It is valuable in itself and can function as a store or "shelter" of value
 - ✓ It is fee-free for consumers
 - ✓ It is the most tangible and liquid form of money
 - ✓ It carries certainty of acceptance as legal tender
 - ✓ Its settlement is immediate there is no settlement risk
 - ✓ It has no credit risk attached to it.
 - ✓ It is a public asset regulated by the central bank, generating public tax (called seigniorage)
 - ✓ It is anonymous and cannot be tracked (Big Brother is *not* watching you!)
 - ✓ It is easy to access and easy to use it does not require technology or infrastructure for P2P payments
 - ✓ It is universal accepted almost anywhere on earth

- ✓ It is interchangeable with other cash, unlike most plastic cards which cannot be interchanged
- ✓ It has a fast transaction speed
- Cash as a public asset, issued by central banks, is the only payment method and form of money still under the authority of the state. Taking cash out of society may be tantamount to the privatisation of part of the money supply and monetary policy, a "retailization" of money production and supply.
- Cash is highly resistant to substitution.
- Other demand drivers for cash:

✓ Informal sector

- World average size of informal sector relative to GDP is 30% (8% in USA)
- > In European Union, 48 million workers in informal sector
- In India, informal sector provides over 90% of employment with 360 million workers
- > In Russia the informal sector makes up 14% of total employment
- Increases in size of informal sector in variably lead to increase in demand for cash (Schneider:2002)

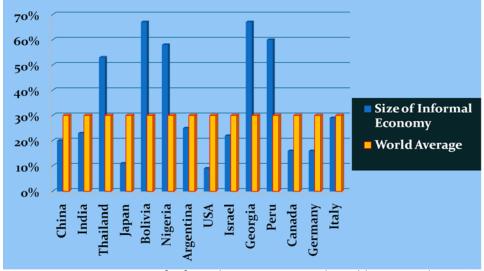


Figure 1.1 Average Size of Informal Economy Around World measured as a % of GDP

The global average size of informal trade is about 30% of GDP. Which government is seriously going to try to eradicate that level of trade from within its boundaries and thus risk pushing up its unemployment rate and poverty levels?

Other demand drivers for cash (continued):

✓ Vending business

- ➤ US vending machine industry worth \$20 billion gross annual revenues with about 6 million machines nationwide
- Over 90% are cash-operated
- ➤ The US's most cash-intensive industry
- ➤ Penetration rate = 48 persons per machine (38 for urban population)

Sources: Federal Reserve Bank of Boston (2006) and NAMA

- Estimated number of machines in the world for food and beverages: 15 -20 million (Source : Catherine Piana, Director General, European Vending Association, 2008)
- At urban penetration rates of 50 persons per machine, there is a world potential for 63,292,700 vending machines
- Approximately 360 billion cash transactions per year (i.e. 30 bn per month or roughly 1 bn per day)!
- The European Payments Council, which is actively promoting non-cash payments, confirmed in a 2004 report that cash is still the most important payment instrument in the world.
- Cash is used for approximately 65% of global payment transactions.

Determinants of Choice to Pay by Cash

Size of payment

High value payments = CHECK

Mid-range value payments = CARD OR CASH

Low value payments = CASH

Type of Goods and Services

Food & beverages - non-luxury items = CASH

Type of Location

Small stores = CASH

Groceries = CASH

Vending = CASH

The Growth Inhibitors for Cash

- Substitution by competitive products? No checks (5 centuries) and credit cards (50 years) failed to do this.
- Costs? No cash transactions are cheap and fast.
- Crime? No crime is a level playing field, and equally damaging, for all types of payments and customer data.
- Regulations? Maybe cuts both ways; France & European Commission (through SEPA) & Singapore have tried to limit cash by law, with limited success.

Cash in the USA

- The vast majority of payment transactions in the USA are C2B of which about 75% are retail payments and 25% are bill payments.
- Cash dominates this huge retail payments sector with values of total annual cash payments almost four times higher than those for card-based retail payments.
- Estimated average daily production of cash in the USA during 2007:

38 million banknotes a day + 42 million coins a day = <u>80 million items of cash</u> manufactured per day! (Sources: US Mint (coins) and Bureau of Engraving & Printing (notes))

Fun Facts About Cash in USA

- 95% of notes printed in a year are to replace older notes.
- Banknotes are 25% linen and 75% cotton, plus synthetic fibres.
- The US Mint is the world's largest manufacturer of coins.
- No woman portrait has appeared on a US currency note since 1896.
- It is thought the origin of the \$ sign came about through shortening "pesos" to p's and then writing the S over the P, finally evolving into \$.
- It costs about 6.2 cents to produce 1 banknote.
- The average lifespan of a note ranges from 16 months for a \$5 note to 89 months (7.4 years) for \$100 note...

Source: Bureau of Engraving and Printing

Cash in Canada

- Cash is rated as cheapest and most reliable Method of Payment (MOP) at point of sale by Canadian merchants.
- Cash is the MOP most universally accepted by merchant s in Canada with 100% acceptance, followed by 93% accepting debit cards & 92% accepting credit cards.
- Debit cards are most preferred MOP by 53% of merchants, followed by cash at 39% with credit cards at only 5%.
- Credit cards are the least preferred MOP and rated the most costly and least reliable.
- Cash rated as totally reliable by 67% of merchants.
- Debit cards rated as totally reliable by 56% of merchants and credit cards by 38%.
- Cash was seen as "not at all costly" by 63% compared to 19% for debit cards and 3% for credit.
- 35% of the volume of payment transactions is by cash, 34% by debit and 25% by credit.
- 30% of the value of transactions is from credit, 30% from debit and 25% from cash.
- Cash is more intensively used than debit in the food, restaurant, gas and general merchandise subsectors.

Source: Bank of Canada Discussion Paper, August 2008 "Merchant Acceptance, Costs & Perceptions of Retail Payments"

Cash in United Kingdom

- £26 bn in cash in circulation.
- £1.4 bn moved in cash moved daily.
- In the last 3 years:
 - Debit Card spending rose by 31%
 - Check spending fell by 33%
 - Cash spending stayed constant at equilibrium

Source: APACS

Cash in Japan

Japan, the world's 2nd largest economy, is cash-dominated, with only 36 non-cash transactions per person per year, compared to 288 per capita in USA (of which 119 are for cheques).

Source: The Future of Cash (2008) AGIS Consulting

Final Predictions for Long-Term Future of Cash

- There is virtually zero chance that cash will be withdrawn from society within the next generation (i.e. 25 years).
- There could even be another hundred years of cash. This will be probable unless there are some dramatic, unexpected changes to the conditions favoring the continuation of cash.

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