As the rapid growth of mobile money provides a viable alternative to tangible cash, poor and unbanked populations have gained more choice in how they save and how they pay for goods and services. Cell-phone transfer options, debit and reloadable cash cards, and other forms of e-cash now augment the services of brick-and-mortar banks. However, along with the benefits come new challenges. Are e-money platforms accessible? Reliable? Sustainable? Secure? Should we be so quick to abandon cash? What is in store for the future?

On April 22, 2011, leaders in the field of financial inclusion gathered at The Fletcher School to take a closer look at mobile payment systems and their implications for the world’s poor. The day featured presentations and panels led by experts from Bankable Frontier Associates, the Bank of New York Mellon, Boston University, CGAP, the Federal Reserve Bank of Boston, and the Feinstein International Center, as well as conference cosponsors the Bill & Melinda Gates Foundation, the Center for Emerging Market Enterprises, and The Fletcher School.

Sessions included:

*Is Cash the Enemy of the Poor?*
This Oxford-style debate explored the pros and cons of mobile money versus tangible cash.

*Is E-cash the Ally of Criminals and Terrorists?*
Terrorist financing experts discussed the challenges posed by mobile money.

*Mobile Money Transfers*
A professor highlights one example of how mobile money can aid victims of a disaster.

*Is Grandma Ready for This? Mexico Kills Cash-based Pensions and Welfare by 2012*
This roundtable discussion explored the extraordinary decision of the Mexican government to abandon cash payments in favor of mobile money.

*What is the Future of Mobile Money? 2020 Scenarios*
Students challenged the experts to predict the impact mobile money could have by the year 2020.

*Where do YOU Stand?*
Audience members engaged in a spirited round of flash debates on the day’s contentious points.

*Killing Cash* was co-chaired by Kim Wilson, Lecturer at The Fletcher School and Senior Fellow at its Center for Emerging Market Enterprises (CEME), and Nicholas Sullivan, also a CEME Senior Fellow. The conference was part of The Fletcher School Leadership Program for Financial Inclusion, an innovative training initiative designed for banking regulators and policymakers from emerging and frontier markets to promote and further develop their work on policy and regulation in financial services for the poor. The program is funded in its first year by the Bill & Melinda Gates Foundation.
Panels and Proceedings

Peter Uvin, Academic Dean and The Henry J. Leir Professor of International Humanitarian Studies at The Fletcher School, welcomed the audience and introduced the first panel.

Is Cash the Enemy of the Poor?  
A Debate Moderated by Peter Walker, Director, Feinstein International Center

Cash is physical, reliable, anonymous and simple – but these same characteristics make it subject to theft and hard to account for, organize, and save. Ignacio Mas, Senior Advisor in the Financial Services for the Poor program at the Bill & Melinda Gates Foundation, framed the day’s first session by highlighting these essential characteristics of cash, as well as providing context on the financial lives of the poor and the importance of their inclusion in the formal financial system. Financial inclusion should mean delivering tools that help poor people manage their lives – but does cash or e-cash help more?

Watch Mas’s remarks here.

The conference began with an Oxford-style debate deliberating this very question. The “cash is the enemy” team included Claire Alexandre, Senior Program Officer at the Bill & Melinda Gates Foundation; Daryl Collins, Senior Associate at Bankable Frontier Associates; David Porteous, Founder and Director at Bankable Frontier Associates; and Michael Tarazi, Senior Policy Specialist at CGAP. The team contended that cash’s prevalence limits choice and acts as “grit in the wheels of financial inclusion:”

![Arguments in favor of e-money](https://example.com)

<table>
<thead>
<tr>
<th>Arguments in favor of e-money</th>
<th>Rebuttals in favor of cash</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Cash is addictive and easy to spend; E-money controls temptation.</td>
<td>• Studies show that people actually perceive a greater loss when using cash over electronic forms of payment.</td>
</tr>
<tr>
<td>• Cash bill payments and transfers over long distances are time-consuming and costly.</td>
<td>• Most transactions actually occur within villages, for which paying a flat fee for M-PESA is needlessly expensive.</td>
</tr>
<tr>
<td>• Electronic budgeting is extremely useful.</td>
<td>• E-budgeting requires financial literacy.</td>
</tr>
<tr>
<td>• Cash offers no payment tracking.</td>
<td>• Cash offers anonymity – something valued by many, not just criminals.</td>
</tr>
<tr>
<td>• Cash is easily lost and stolen – and can even be a threat to physical safety.</td>
<td>• At least the security of cash rests with the owner as opposed to third parties.</td>
</tr>
<tr>
<td>• There is no privacy with cash – children, neighbors, and relatives can see it.</td>
<td>• A recent survey in Kenya showed that 65% of M-PESA users still save under mattresses. If it is so much safer than cash, why do they do this?</td>
</tr>
<tr>
<td>• Cash limits choice in financial management.</td>
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Their opponent, the “cash is NOT the enemy” team, was comprised of Jenny Aker, Assistant Professor at the Fletcher School; Scott Schuh, Director of Consumer Payments at the Federal Reserve Bank of Boston; Parker Shipton, Professor at Boston University; and Kim Wilson. This group argued that mobile money’s merits are still unproven, with too many questions remaining about its feasibility, reliability, sustainability:

<table>
<thead>
<tr>
<th>Arguments in favor of cash</th>
<th>Rebuttals in favor of e-money</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Cash has an intrinsic, emotional value.</td>
<td>• People are indeed accustomed and attached to money, but so what – it is an evolution just like anything else.</td>
</tr>
<tr>
<td>• E-money use requires education and technological maintenance – things that are trickier for the poor to keep up with.</td>
<td>• People say e-money is too difficult, but let us not sell people short – they can and do learn.</td>
</tr>
<tr>
<td>• Cash is a public good free and open to all. Alternatives to cash are run by the private sector and carry transaction costs and fees.</td>
<td>• Cash is NOT free – it is an expensive instrument for which the social cost is often in excess of the cost of electronic payments. Even worse, cash is opaque – its costs are concealed. Opportunity costs and the costs to others in the cash value chain easily override benefits.</td>
</tr>
<tr>
<td>• Cash is reliable – it will always work, even when the mobile towers go down.</td>
<td></td>
</tr>
<tr>
<td>• E-money may not be as sustainable as we think. If it were, why would we so often have to fund it with public sector resources?</td>
<td></td>
</tr>
<tr>
<td>• E-money claims are just that – claims. More success stories outside of M-PESA are necessary.</td>
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</tbody>
</table>

By audience vote, the “cash is NOT the enemy of the poor” team was declared the winner, and cash was saved – at least temporarily.

But does it really come down to a choice between cash or mobile money? Bhaskar Chakravorti, Fletcher’s Senior Associate Dean for International Business and Finance and Executive Director of the Institute for Business in the Global Context and the Center for Emerging Market Enterprises, suggested that e-money’s displacement of cash will likely depend on the extent to which the public is willing to put its faith in providers – and in technology more generally – to take hold of some of its most important personal information. Different sectors have moved in the “virtual” direction more quickly than others. What will happen with mobile money remains to be seen – but the optimal outcome may well be a complex mix.

*Watch Chakravorti’s closing remarks [here](#).*
Is E-Cash the Ally of Criminals and Terrorists?
A Panel Discussion Moderated by Michael Tarazi

Today there is a need to re-examine the role of the Financial Action Task Force (FATF) and reconcile the fight against money laundering and terrorism with efforts to increase financial inclusion. But what can be done to bring these goals in line?

For the final panel of the morning, experts Katherine Sikora Nelson, Managing Director at the Bank of New York Mellon, and Ibrahim Warde, Adjunct Professor of International Business at The Fletcher School and author of The Price of Fear: The Truth Behind the Financial War on Terror (2007), addressed this key question from their complementary perspectives. They agreed that e-cash can indeed be good for the poor at the same time as being an asset to terrorists and other criminals.

They argued that while mobile technology does not actually change the nature of banking – the same fundamental security challenges remain that always have – mobile money does provide a new and powerful avenue through which to exploit them. The panelists warned that until a matching set of regulatory tools exists to address this, financial inclusion will likely remain at odds with anti-terrorism/anti-money laundering efforts. They were also careful to note, however, that terrorists and money launderers are actually two distinct groups with very different motivations, and they should be addressed as such.

Mobile Money Transfers
A Mobile Money Application Presentation

Could mobile money be used to dispense aid in times of crisis?

Jenny Aker, Assistant Professor of Development Economics at The Fletcher School and a proponent of cash in the morning’s debate, conceded one major benefit of mobile money – its potential for expediting aid administration. She highlighted the example of international humanitarian organization Concern Worldwide, which had transferred $500,000 via mobile phones and $3 million as physical cash to citizens affected by droughts in Nigeria and Niger. She explained that while at first it was more expensive to distribute the aid by mobile phone due to the need for increased mobile technology access and education, by the second month, costs decreased to a quarter of the cost of the cash system. Meanwhile, beneficiaries had received remittances more quickly, and women had a greater say in how money was spent.

Watch Aker’s presentation here.
In December 2010, the Federal Government of Mexico directed all government agencies to begin coordinating with the Ministry of Finance to make all government to person (G2P) disbursements electronic by December 2012. But can the government create the infrastructure for an electronic ecosystem that can truly serve all citizens?

To begin the afternoon session of the conference, Matthew Herbert, Ph.D. Candidate at The Fletcher School, delved deeper into the Mexican government’s decision to move from cash-based payments to electronic. He explained that the Treasury had wanted to use e-payments to achieve cost savings, while other government entities viewed it as a mechanism to increase financial inclusion. Dependencias dedicated to social welfare became the primary proponents of using the new technology to enhance financial inclusion, and Oportunidades, Mexico’s marquee social welfare program, was perceived to potentially gain significant benefits from the new electronic payment infrastructure. Herbert noted that while the system is not without operational challenges, and the benefits of the movement into electronic payments have yet to be proven, there has been high uptake so far.

Watch Herbert’s presentation [here].

Read the full case study [here], co-authored by Herbert with Ashirul Amin, also a Ph.D. candidate at The Fletcher School, and Ahmed Dermish and Denise Dias, both Associates at Bankable Frontier Associates.

Following Herbert’s presentation, scholars and regulators in the field offered their remarks on the system’s complexities, challenges and promise. The panel was moderated by Dermish and included Amin; Pia Roman, Head of Inclusive Finance Advocacy Staff at the Central Bank of the Philippines; Narda Sotomayor, Head of the Department of Analysis of Microfinance Institutions at the Superintendency of Banks, Insurance and Pension Funds in Peru; and Luis Treviño, Director for Access to Finance at the National Banking and Securities Commission (CNBV), Government of Mexico.

Watch the panel discussion [here].
What is the Future of Mobile Money? 2020 Scenarios
A Presentation and Panel Discussion Moderated by Bhaskar Chakravorti

What will the future of payments look like? Will cash be more or less prevalent in 10 years? What payment options beyond credit cards and mobile phones might contribute to displacing cash even further?

Fletcher students considered whether the future of money will fall into private or public hands, and whether it will lean toward tangible or virtual means of exchange. Students proposed four possible scenarios for the future of payments – Private Tangible, Private Virtual, Public Tangible, and Public Virtual:

**Private Tangible**
What if the US dollar collapsed or the e-money system crashed? People would most likely create their own currency – perhaps something like the local Ithaca, New York, currency “Ithaca Hours” – or even return to a barter system to continue economic activity while the network is down.

**Private Virtual**
Ever heard of online gaming currency or Facebook credits? As these expand, people will be able to use them for even more real world things, much like airline points have expanded. Currency is already virtual with the internet and mobile payments, and examples like these show it could become private as well.

**Public Tangible**
Would you run the risk of using e-payments if it was not 100% secure? As more transactions go across electronic rails, criminal networks may gain traction in tapping in. If trust erodes too far, people will revert not just to cash but maybe even so far as to a gold standard.

**Public Virtual**
In this scenario, people can pay – at no extra cost – by swiping a card, bumping a mobile phone, or using an SMS. This will happen if the government makes private innovation public – and commits to financial inclusion by providing these services at no direct cost to customers.

So where are we headed? Panelists Claire Alexandre and David Porteous reflected on the factors most critical in shaping these scenarios, highlighting the importance of provider trust, the multiplicity of the roles played by both the public and private sectors, and the need for options encompassing both the tangible and intangible realms.

View the scenarios presentations and panelist responses [here](#), and the subsequent Q&A [here](#).

To close the day, audience members engaged in a spirited round of flash debates, sharing their views on the day’s most contentious points.