Alliance for Monetary and Financial Stability

Ostbayerische Technische Hochschule Amberg-Weiden

Cash, Uncertainty and Crises

Prof. Dr. Franz Seitz

(Technical University of Applied Sciences, Weiden, Germany; Alliance for Monetary and Financial Stability; CashEssentials)

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1. Introduction/Motivation

- Sufficient supply of **money** without any inflationary or deflationary pressure necessary for well-functioning economy
- Is there a difference between **private** money (deposits) and **public** money (cash)?
- Is there a difference between **normal** times and times of **crisis** and **uncertainty**?

The USP's of cash

- ✓ **anonymity** in use,
- ✓ **safe haven** in crisis periods,
- ✓ **central bank money** and therefore mostly **trustworthy**,
- ✓ no need for further **involvement of service providers**,
- ✓ **offline payment** medium,
- ✓ can be used for both **small and large payments**,
- ✓ **simple**, **convenient** and **quick**,
- ✓ **definitive** and **final** payment,
- ✓ **financial and payments inclusion**,
- ✓ **overview and control of spending**,
- ✓ relatively **secure against counterfeiting**,
- ✓ **cash** is much more than **payments.**

There is **no perfect** digital/ electronic **substitute for cash!**

From microeconomics to macroeconomics: Consequences of a monetary contraction

1. Lessons from the Great Depression (1929 – 1933)

Index of All Common Stock Prices in the US

Stock market crash in 1929

Passive monetary policy by the FED **contributed heavily to the Great Depression** (Friedman & Schwartz 1963):

Federal Reserve Discount Rates New York in %

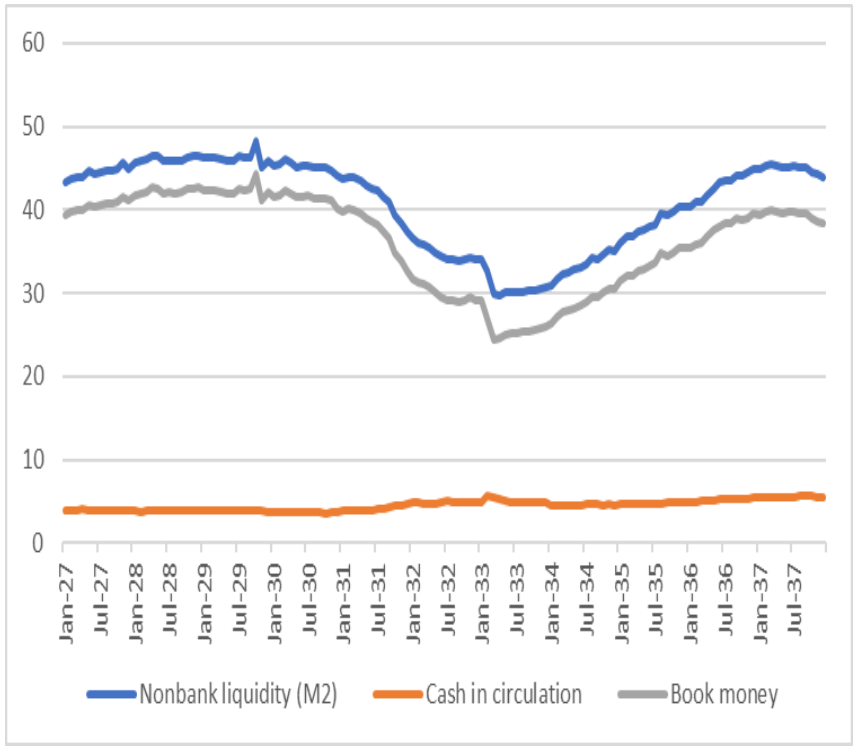
Interest rate increase during the crisis!

Reserves of US commercial banks with the FED in USD bn

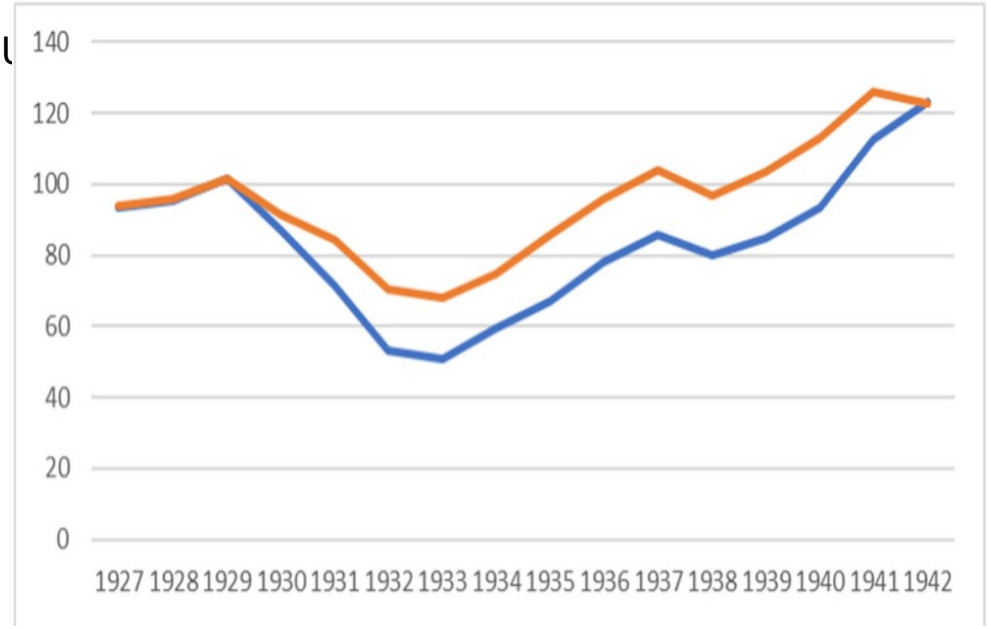
Liquidity provision for US banks:
Too little, too late

Devastating consequences for US money stock and real economy!

Nonbank liquidity (M2), book money and cash held by nonbanks in the US (USD bn)



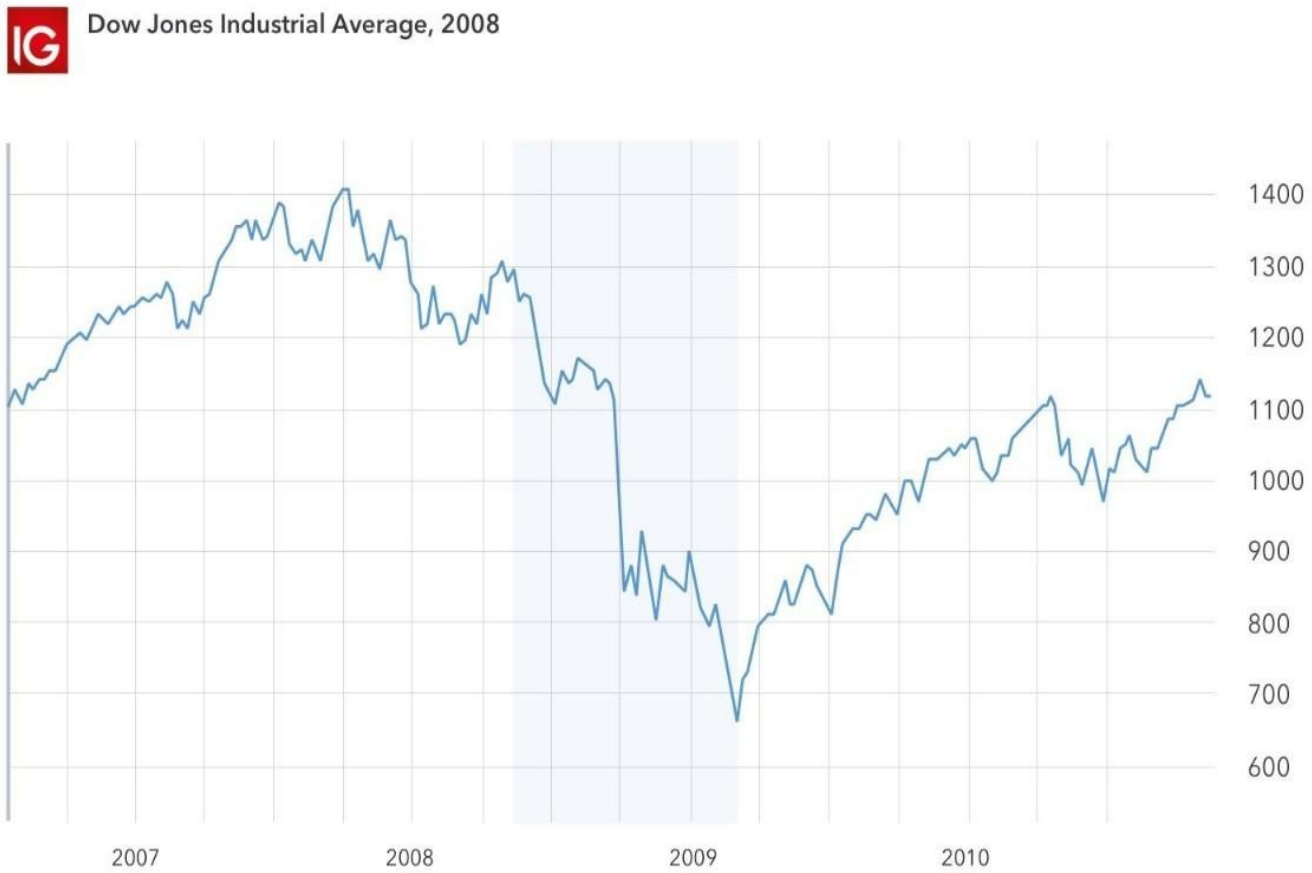
Nominal and **real** Gross National Product (GNP) in the U



US money stock declined by 33%

Real GNP declined by 33%

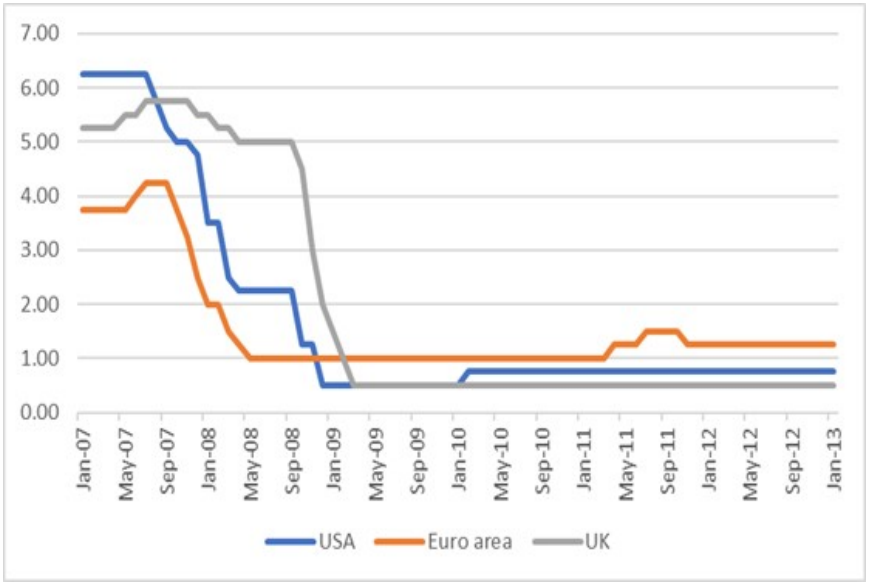
2. Great Recession 2008/9 – major mistakes not repeated



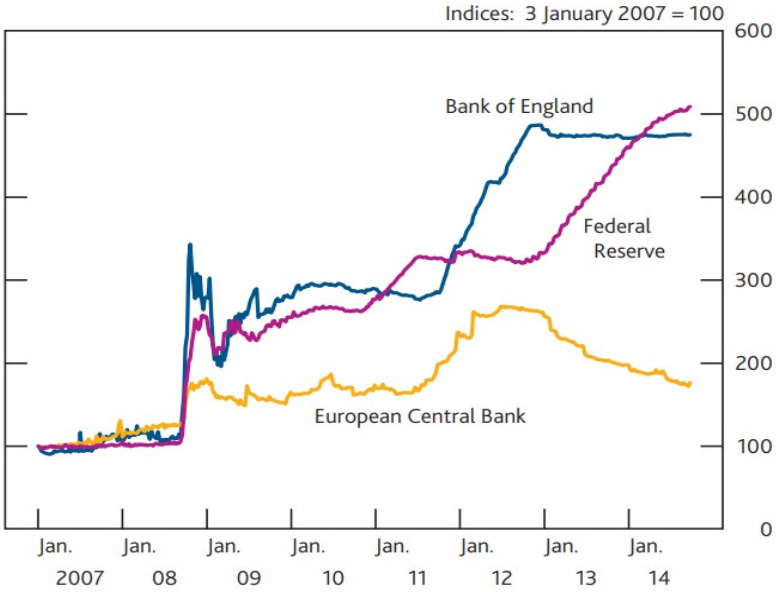
Stock market crash in 2008

Active monetary policy worldwide contributed heavily to the quick economic recovery process

Central bank interest rates (%) in major currency areas



Growth in central bank balance sheets in the US, Euro area and UK



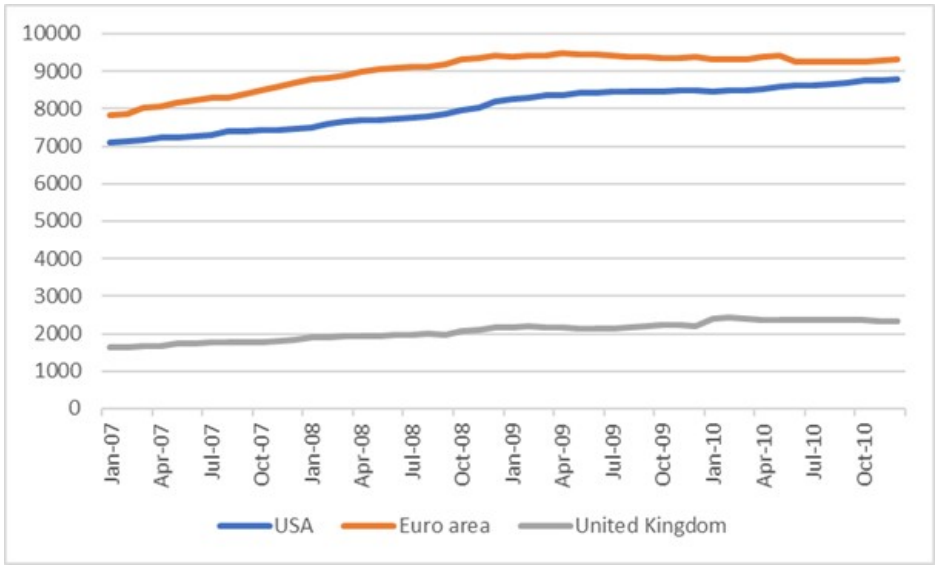
Sources: Bank of England, ECB and US Federal Reserve.

Deep and quick cuts in interest rates

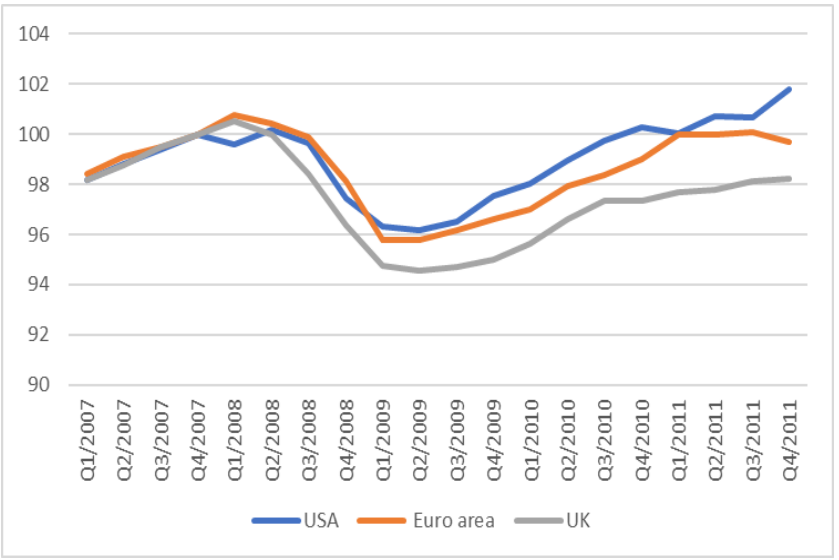
Ample liquidity provision for banks worldwide

Money stock continued to increase and accelerated the economic recovery

Nonbank liquidity for different currency areas in national currency bn



Real GDP in major currency areas



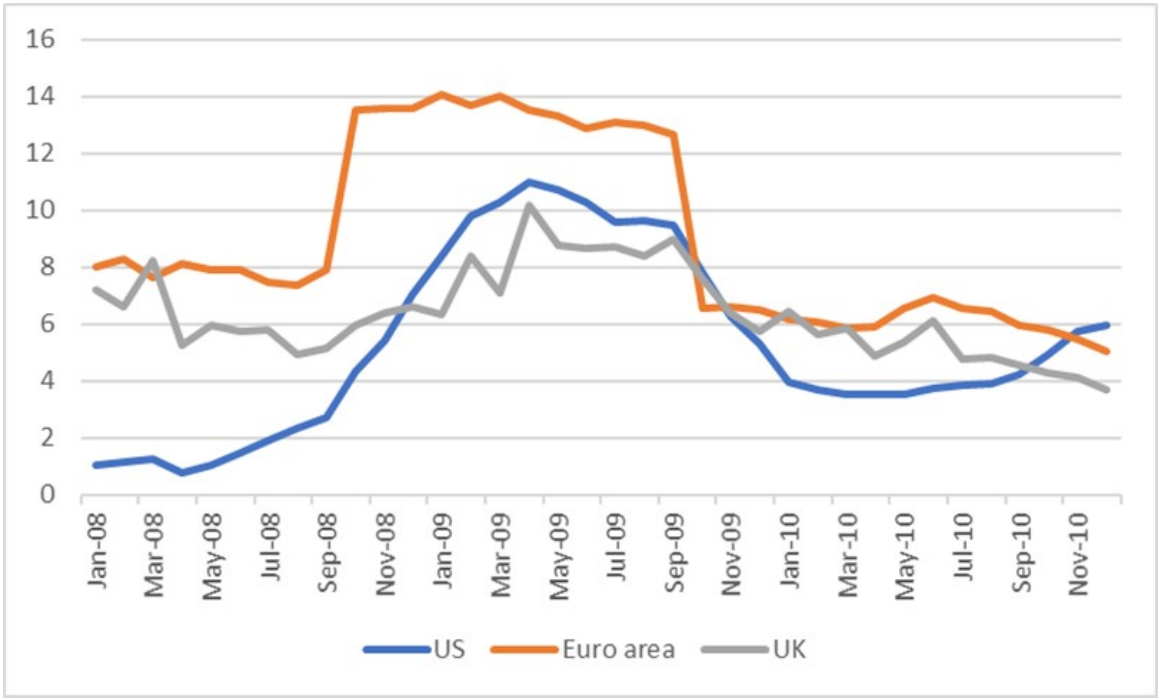
Money stock did not decrease in major currency areas

Real GDP declined only by roughly 5% in US, Euro area and UK

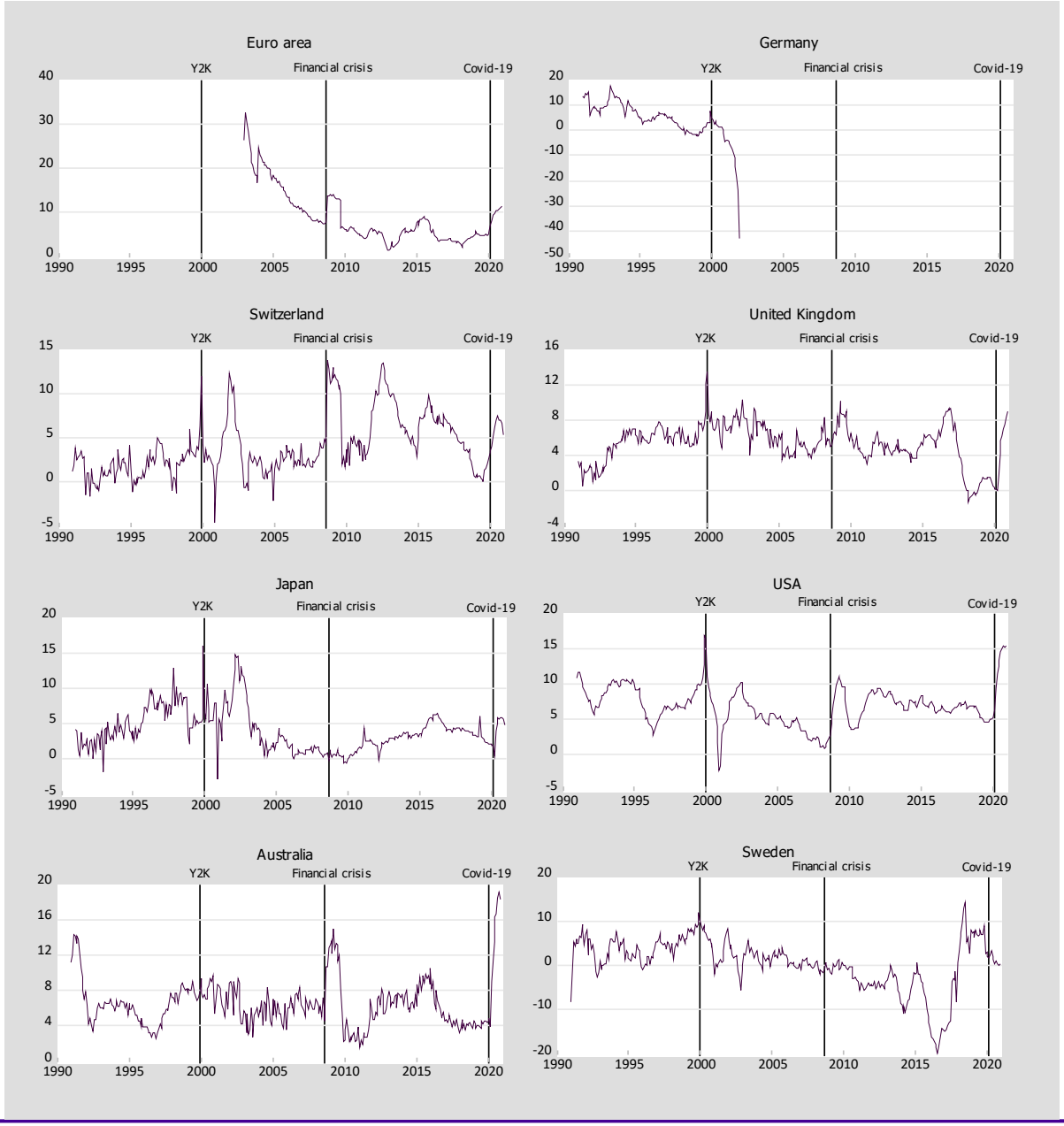
On the stabilizing role of cash

How did the central banks avoid a decrease in the money stock in the economy?

Annual growth rates of cash in circulation in major currency areas in %



Central banks provided cash in a perfectly elastic way!



A strategy that always works in times of crisis!

Cash demand **in various times of crisis** and **in different currency areas**

Domestic demand for small and large denominations during selected crises

Small banknote denominations								
	Euro area	USA	Switzerland	Japan	UK	Sweden	Australia	Germany
Y2K	n.a.	0.11	0.03	0.02	0.02	-	-	0.02
Fin	0.03	-	-	-	0.02	–0.02	0.05	n.a.
Cov	0.04	0.03	0.01	-	-	-	0.04	n.a.
Large banknote denominations								
	Euro area	USA	Switzerland	Japan	UK	Sweden	Australia	Germany
Y2K	n.a.	0.05	0.05	0.05	0.02	0.04	0.02	-
Fin	0.05	0.02	0.04	-	0.04	-	0.01	n.a.
Cov	0.03	0.02	0.02	0.02	0.02	0.04	0.02	n.a.

Source: Rösl/Seitz (2022)

Increased cash demand in times of

- **technological crises** (Y2K),
- **financial crises** (Fin) , and
- **natural disasters** (Cov)

Domestic demand for domestic cash in times of uncertainty

		Domestic demand for domestic cash as a	
Types of uncertainty		**means of payment**	**store-of-value**
Uncertainty of digital infrastructure		+	++
Confidence crisis of financial system		+	++
Natural disasters		++	+
Political uncertainty		+	++
Inflationary crises	considerable	++	−−
	hyper	−−	

Notes: ++ = strong increase in demand; + = perceptible increase in demand; - = perceptible decrease in demand; -- = strong decrease in demand

Literature survey and case studies show **enormous heterogeneity in domestic demand for domestic cash during periods of uncertainty**

Importing stability – domestic demand for foreign cash

		Domestic demand for foreign cash as a	
Types of uncertainty		**means of payment**	**store-of-value**
Digital infrastructure uncertainty		0	0
Confidence crisis of financial system		+	++
Natural disasters		0	+
Political uncertainty		+	++
Inflationary crises	considerable	+	++
	hyper	++	

Notes: ++ = strong increase in demand; + = perceptible increase in demand; 0 = demand not affected/negligible; - = perceptible decrease in demand; -- = strong decrease in demand

In times of uncertainty, foreign cash stabilizes domestic…

- inflation
- economic growth
- payment infrastructure
- savings (especially of the poor)

Channels

- ✓ private travel,
- ✓ cash remittances,
- ✓ international banknote shipments

Implications for cash supply

- **Governments** should ensure a proper **cash infrastructure**
- Central banks should **stockpile sufficient cash** in its vaults to meet even an unexpected demand in times of uncertainty
- Central banks should always be able and willing to **provide cash** in a **perfectly elastic way**
- Cash has to be broadly available in **normal times**
- However, **sustainability concerns** necessitate a reduction of the environmental impact of the **whole cash cycle** and **banknotes** should remain **longer in circulation**
- Central banks should also be willing to **meet foreign demand for domestic cash**
- **Seigniorage** from foreign cash demand is **well earned** due to stability export

Summary and conclusions

- A stable and sufficient **money supply is of utmost importance** for a well-functioning economy
- Cash has its own **unique characteristics** which gain importance especially during times of uncertainty and crises
- Cash always stabilizes and leads to a more resilient economy, but the type of crisis determines if this role is exerted by domestic or foreign cash
- Cash acts as a **public insurance** the central banks pay out if the overall situation becomes dire
- Consequently, an **efficient payment mix necessarily includes cash**
- Undisputed task of central banks: ensure that cash remains in circulation and functions properly in **normal times**
- **Supply-side** driven problems for the cash cycle should be avoided
- Worldwide **uncertainty** has increased in tendency in the last two decades and will stay at elevated levels in the future
- Cash is part of successful **crisis management** as it is the **physical** form of the **safest** asset in a currency area

References

- Rösl, G. & F. Seitz (2022), On the Stabilizing Role of Cash for Societies, IMFS Working Papers, No. 167, June.
- Rösl, G. & F. Seitz (2022), Cash Demand in Times of Crisis, Journal of Payment Systems & Strategies, Vol. 16(2), 107-119.
- Rösl, G. & F. Seitz (2023), Uncertainty, Politics, and Crises: The case for cash, Discussion Paper, June, forthcoming.

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Thank you very much for your attention!

Prof. Dr. Franz Seitz

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CashEssentials
https://cashessentials.org/

Alliance for Monetary and Financial Stability
http://aktionskreis-stabiles-geld.de/

Weiden Technical University of Applied Sciences
Hetzenrichter Weg 15
D-92637 Weiden
Tel.: +49 961 382 1318
E-Mail: f.seitz@oth-aw.de
Homepage: www.oth-aw.de/seitz