

## Medienportal

# Nobel Price in Economics 2022 awarded to Ben Bernanke, Douglas Diamond and Phillip Dybvig

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The Royal Swedish Academy of Sciences announced today that the Nobel Price in Economics 2022 would be awarded to Ben Bernanke (Brookings Institution), Douglas Diamond (Chicago) and Phillip Dybvig (U. Washington, St. Louis) in order to honor their path-breaking research on financial crises and systemic risk.

The award highlights the role of financial intermediaries for society in general and for economics and finance in particular. In their seminal paper on „Bank runs, deposit insurance, and liquidity“ (Journal of Political Economy, 1983), Diamond and Dybvig developed the idea of liquidity insurance. By collecting deposits and investing an appropriate part of them in long-term projects, the banking system can provide liquidity to short-term consumption needs as well as returns on longer-term investments. Since depositors don't know when their liquidity needs arise ex-ante, a well-designed deposit system insures them against the capriciousness of their consumption needs.

The only drawback of such a system is that multiple equilibria arise: one „good“ equilibrium consists of efficient liquidity insurance as described above, but the possibility of an inefficient „bad“ bank-run equilibrium will arise at the same time. That's because banks cannot



Ben Bernanke, Douglas Diamond and Phillip Dybvig (fLTR)

monitor individual consumption needs. Accordingly, in the unfortunate case that all depositors call their deposits, the rational choice for any individual depositor will be to run the bank as well. Consequently, since a proportion of deposits is invested in high-yielding illiquid long-term assets, the bank will not be able to honor and repay all withdrawals at the same time and become insolvent.

The simultaneous occurrence of multiple equilibria in a coordination game between depositors has been the basis for modern theory of banking regulation. The institutions of deposit insurance, lender of last resort and other regulatory interventions may contribute to eliminating the bank-run equilibrium, and, hence stabilize the banking system.

I was first introduced to the Diamond-Dybvig model in a Capital Markets course taught by Mervyn King, the later Governor of the Bank of England, in 1987 at LSE. Mervyn praised the model as groundbreaking and called it the „first model of systemic risk“. In fact, however, the „Diamond-Dybvig model based on Bryant“ (Sudipto Bhattacharya) builds on the idea of maturity transformation, an idea pioneered by John Bryant (1947-2020), who passed away two years ago.<sup>1</sup>

Remarkably, after more than a century of stability in the UK banking sector, it was exactly Mervyn King, who, now as Governor of the Bank of England had to manage a fully fledged modern-day bank-run on Northern Rocks right at the start of the Great Financial Crisis.

The management of the financial crisis has also been the central achievement of the third Nobel laureate Ben Bernanke. As a scholar he had scrutinized the Great Depression in the 1930<sup>2</sup>, which helped him later in his role of Chairman of the Federal Reserve Bank to prevent the earlier mistakes of denying sufficient liquidity to the banking system at large. Under his chairmanship the banking system was saved, restructured and recapitalized. In 2022 the US banking system seems to be much better prepared than European banks to withstand the economic challenges caused by the ongoing Covid-19 pandemic and the Russian War. Based on Bernanke's historical insights, the US was fortunate to have had such an acclaimed financial expert as Chairman in those troubled times.

Thomas Gehrig, London, October 2022

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<sup>1</sup> Bryant, John (1980): A model of reserves, bank runs, and deposit insurance, *Journal of Banking and Finance* 4, 335–344.

<sup>2</sup> Bernanke, Ben S., 1983, Nonmonetary effects of the financial crisis in the propagation of the Great Depression, *American Economic Review* 73, 257–276

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Forschung