

## THE SOCIAL VALUE OF FAMA-EFFICIENT MARKETS

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Eugene Fama (1970) – the 2013 economics Nobel laureate – has described the ‘ideal’ financial market as one where ‘prices provide adequate signals for resource allocation ... investors can choose among the securities that represent ownership of firm’s activities under the assumption that security prices at any time “fully reflect” all available information. A market in which prices always “fully reflect” available information is called [Fama-efficient]’. This relationship between price and information is known as the efficient market hypothesis. Of course, in 1970, Fama didn’t name the efficient markets hypothesis after himself – an informationally efficient market should be labelled ‘Fama-efficient’ to avoid confusion among all the various definitions of efficiency.

Solomon Tadesse (1999) identifies two interrelated channels whereby the financial economy and the real economy reinforce each other.

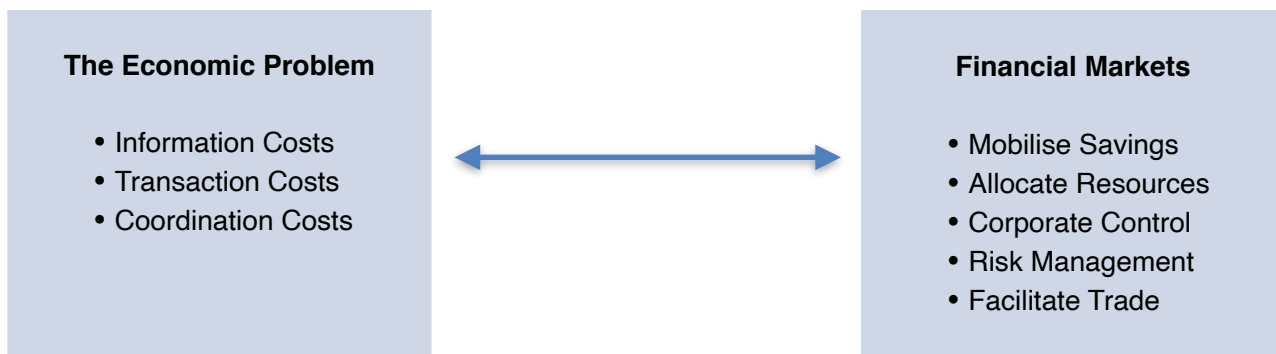
- **Information Production:** Financial markets provide incentives for economic agents to acquire and disseminate information about firms. This information is revealed through prices in the market. Investors and management rely on these prices in their decision making. Ultimately, a Fama-efficient market must allocate resources towards profitable investments and away from unprofitable investments.
- **Monitoring:** The information provided by markets allows principals and agents to evaluate past managerial decisions and develop incentive schemes for the future. In addition, the market is able to play an important role in managerial discipline. Those managers who do not exit unprofitable investments must be “disciplined” by the market and those managers who undertake profitable investments should be rewarded.

These two requirements can be summarized as follows: Investors must be able to identify “good” investments and must have incentive to take those “good” investments.

Information is dispersed and discovering information is costly. The costs of discovering information are called transaction costs. In principle, two types of transaction cost can be determined: Exchange costs are those costs incurred in the trading itself including search costs; and, policing costs are those costs that are incurred ensuring that each party to the exchange performed as promised. In a blockchain ecosystem policing costs are minimised through the usage of smart contracts, nonetheless information discovery costs are high. Traders who discover and introduce new information to the market are rewarded by earning alpha.

The financial system exists to overcome asymmetric information, uneven distribution of wealth, and intertemporal distributions of wealth. Specifically, the financial system allocates wealth to those individuals who have investment opportunities, but insufficient wealth, from those individuals who have surplus wealth, but insufficient investment opportunities. In return it allocates financial claims on those investment opportunities.

Robert King and Ross Levine (1993) argue that the financial system can affect productivity growth in the economy via any (or all) of four channels: screening entrepreneurs to select the “best” projects, mobilizing resources to undertake investments, diversifying investors’ portfolios, and indicating the benefits of undertaking productivity-enhancing activities.



Financial markets are only efficient allocators of resources if they can send/receive clear signals and if incentives exist to undertake efficient investments. Jeffery Wurgler (2000) investigates the efficiency of capital allocation across economies. Particularly, he is interested in whether efficient markets are associated with greater efficiency in capital allocation. Using a cross-section of 65 economies he finds that those economies with developed financial markets increase investment in growing industries and reduce investment in declining industries relative to those economies with under-developed financial markets.

All that having been said ... the Overlap value proposition can be clearly seen in the diagram.

The Overlap platform directly addresses the 'economic problem'. Most importantly it lowers coordination costs by matching traders and open-sourced research. This in turn economises on information costs and allows traders to bring that information to market and trade on it which in turn should generate alpha for those traders. Transaction costs are economised on two margins: the matching of researchers and traders, and by the provision of a single trading platform that straddles several exchanges.

The consequence of addressing the economic problem in turn results in greater levels of savings being mobilised for investment purposes and better allocation of those resources. This should result in more resources being allocated to higher value projects and resources being allocated away from lower value resources. It should also result in better quality trading within crypto markets and existing noise traders are eliminated from the market and better-quality information is used to drive investment decisions.

The table below sets out some of the benefits to the various participants to the Overlap platform and some of the indirect benefits to non-participants.

Participant	Benefit
Traders	Access to research, Access to trading platform
Researchers	Ability to monetise research, new career opportunities
Investors	High quality investments, Increased sophistication in the market
Creators	Access to finance, lower of capital

### Bibliography

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