

Why girl maths is economics

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Economists often find ourselves trying to explain to family and friends exactly what it is that we do. One way I've found useful in communicating the discipline to those outside of it is explaining the difference between economics and finance. Finance is concerned with real money – cash flows and balance sheets – while economics is concerned with real value – both monetary and non-monetary.

So when a Tik Tok trend emerged called 'girl maths', I was interested to observe how much of it related to this distinction between economics and finance.

The 'girl maths' trend started with women presenters in a [New Zealand radio show](#) explaining how they justify large purchases. This took off with other women around the world sharing their own examples of girl maths, and naturally men jumping on board to share how the trend validated their worldview that women are bad at managing finances and are 'frivolous' spenders.

Sure, some of the concepts of girl maths are silly, for example that cash is free money. But three things stood out for me in the trend and its criticism.

First of all, why is spending on clothes or make-up more frivolous than spending on golf clubs or video games? The world would be a better place if the disproportionate share of men in power reflected on the many poor investment decisions they make.

Secondly, the data is clear about who manages household finances – women make up 70-80% of [purchasing decisions](#). Women have demonstrated for centuries that they are capable of understanding and applying financial concepts, but continue to be underappreciated for household management and patronised about their financial choices. As articulated by Yiva Baekstrom in [The](#)

Conversation: “The girl math trend is a demonstration of women’s mastery at applying portfolio theory to their shopping, making them investment powerhouses whose potential is overlooked by the financial services industry.”

This continues to be evident in the way we assess financial literacy through three [questions](#) on interest, inflation and diversification, which while important fail to recognise the financial skills women possess as heads of households. Further, studies are starting to show an interesting gender differential in investing – the [2021 Women and Investing Study](#) found that women outperformed men by 40 basis points on average, driven by factors like longer-term mindsets.

And finally, many (but not all) of the ideas in girl maths reflect fundamental concepts of economics, and demonstrate the important distinction between economics and finance. Drawing on examples from [Mashable](#), this includes:

- Willingness to pay and consumer surplus
- Opportunity cost
- Sunk cost

Willingness to pay and consumer surplus

- The girl maths example: A \$400 handbag that you will use every day over a year is really costing you just over \$1 per day.
- The economic concept/s: An individual will buy a good or service if their willingness to pay for that item is at least as high as the price of it. They then receive a total ‘value’ or consumer surplus equal to the difference between the price of an item and their willingness to pay.

In this example, willingness to pay is applied by considering cost-per-wear – if you are willing to pay more than \$1 per day for the bag, then you should purchase it.

Sure, we’re not considering budget constraints, but this example illustrates that our purchasing decisions are not just bound by price tags and the amount of money in our bank account, but also our preferences and values.

Opportunity cost

- The girl maths example: If you fail to spend \$400 on hair extensions for your wedding, you will lament your wedding photos for years after and have to redo your whole wedding, ultimately costing you tens of thousands of dollars.
- The economic concept/s: The cost of any decision is the value of the next best alternative (its opportunity cost).

The example may be extreme, but it illustrates that any purchasing (or other) decision you make comes not just with a financial cost (i.e. \$400) but also with an opportunity cost. In this case, not getting hair extensions has a huge opportunity cost.

Sunk cost

- The girl maths example: When you buy concert tickets months ago, so by the time you get to the concert it's actually free.
- The economic concept/s: Any cost that cannot be recovered should not be used to inform future decisions. It is therefore a sunk cost.

Past spending should not inform current spending and our internal cost-benefit calculations, because it cannot be recovered regardless of the choice you make.

In this sense, the concert is 'free', and taking this a step further, deciding to stay home on the day of the concert because it's raining is a rational choice if you get more enjoyment from staying in than going out. You're not going to get back the money either way.

The takeaway from this is not that girl maths is a science to live our lives by. Of course it's not. Budgets and financial planning matter. At the simplest level, girl maths is a fun trend that represents the kind of mental accounting people do every day when considering whether to buy a nice coffee or make one at home.

But on a more nuanced level, girl maths makes us reflect on how we can think like an economist in our every-day decisions, demonstrating the powerful toolkit that economics provides beyond finance.