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# Wallet Share

Whilst the concept is self-explanatory, the term 'wallet share' is dynamic: the amount of disposable income can move up and down independently of consumers' spend on particular goods or services. For example, a consumer may spend a decreasing share of a growing wallet on music or, conversely, an increasing share of a shrinking wallet on music. During a downturn, consumers could spend less on music as so much is now available for free or more on music as it's a relatively cost-effective form of entertainment.

What makes wallet share a relevant topic to explore in early 2011 is the peculiar and persistent squeeze that consumers have been feeling on their wallet in recent times; and the reality that we are in for 'a long period of bumping along the bottom'<sup>1</sup>. This inflation-led squeeze on the

wallet is two-fold: inflation is eroding our earnings and our savings. With savings offering minimal or negative return in real terms, and earnings decreasing in their real purchasing power, consumers will increasingly face tough budgetary choices.

This Economic Insight paper begins with an historical analysis of wallet share in the UK from 1997 to 2010 to illustrate aggregate consumer spend on both live and recorded music as a share of total consumer expenditure. We then turn towards the future to draw attention to the consumer and media spend going forward. This work is part of a wider initiative, involving PRS for Music, Intellectual Property Office and Imperial College, to improve how the music industry is measured and interpreted by both policy makers and professionals.

## Wallet share, revisited

The concept of wallet share was last applied to the UK music industry in a Music Ally publication way back in October 2007<sup>2</sup>. This was around the same time that UBS senior economist George Magnus coined the term Minsky moment to describe when credit supply dries up and central banks have to intervene. In the unprecedented years of financial volatility that followed, it's safe to say a lot has happened to the UK consumer's wallet since then.

We return to the concept of wallet share with the assistance of academic experts at Imperial College, Jonathan Haskel and Peter Goodridge, who enabled us to draw upon improved data sources to understand incomes, expenditure and savings.

This Economic Insight paper commences with an historical analysis, and then turns to the future by drawing upon macro indicators to develop an economic outlook for consumer spending. With inflation above interest rates and GDP growth remaining sluggish, there is an emerging consensus stemming from the influential work of economists Carmen Reinhart and Kenneth Rogoff which, put bluntly, states that the UK is in for 'a long period of bumping along the bottom'. With inflation likely to depress earnings and erode savings for several years to come, music and media should consider this Economic Insight when building strategies for coping with the wallet squeeze over the medium term.

PRS for Music represents 75,000 songwriters, composers and music publishers in the UK and protects the rights of international songwriters through over 150 arrangements with international bodies.

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<sup>1</sup> Carmen M. Reinhart & Kenneth S. Rogoff (2010) *This Time Is Different: Eight Centuries of Financial Folly*, Princeton University Press

<sup>2</sup> Music Ally, 18 October 2007: Will Page Op-Ed *Time to Face the Music*

### Wallet methodology

The methodology adopted for this study began with Imperial College, which presented three measures of 'wallet' to use in the time series analysis. We opted to keep things in nominal terms (not adjusting for inflation) as this avoids the complexity of interpreting different trends based on different deflators. This also best illustrates the changing face value of CDs and concert tickets which have followed diverging paths, an observation which we will return to in our conclusion.

We have chosen to begin the historical analysis in 1997, when Labour entered government, and have constructed evidence-based estimates for 2010. Finally, and most importantly, this analysis will incorporate consumer spend on live as well as recorded music, so we can consider the displacement and additionality effects within the consumers 'music budget' while considering the constraints going forward.

Three measures are presented, taken from the Office for National Statistics (ONS) data for households in the *National Accounts*. The official ONS codes and meanings are offered here:

- **NSSF** is the total income available to households after tax, which can be used to spend or save, adjusted for changes in the net equity of households.
- **NSSD** is a similar measure of disposable income that adjusts for the receipt of social transfers and benefits.
- **NSSG** is total consumer expenditure which is actual spend and, when added to savings, would equate to total income available to households after tax (NSSF).

As the objective for this paper is to present an historical analysis of wallet share, we have taken the view that what matters most is what was actually spent. Therefore, we opted for the total consumer expenditure (NSSG) - so we can work out how much of consumer spend was spent on recorded and live music. The logic for this choice is simple: if a consumer had a hundred pounds in 1997, and saved ten, then we're interested in where the remaining ninety was spent during that year.

### Music methodology

We have incorporated into this analysis consumer spending on live and recorded music. The inclusion of live music revenues presented a number of challenges as our analysis had to be reworked back to 1997. The standard approach we've applied to the consumer spend on live music has been to scale up our royalty collections by factoring in VAT and booking fees to arrive at the total spend on primary tickets for UK music events. Secondary ticketing data, which is increasingly becoming a quasi-primary market obscured from our radar, comes from TixDaq which monitors and measures this important marketplace. Ancillary revenue, or 'on-the-night-spend', is the most challenging estimate to produce. We used granular data to produce venue-weighted estimates for recent years. It became increasingly complex when trying to calculate estimates to 1997 so we chose to re-scale estimates using deflators, anecdotal evidence from surveys published in the past and consultation with industry experts.

Measuring consumer spend over time on recorded music is relatively more straight forward - the numbers are published in the annual BPI Statistical Handbook. This data is usually referred to as 'retail spending on recorded music' and constructed using Official Charts Company and BPI estimates of spend on singles, albums, digital (singles and albums, downloads and streams) and music DVDs.

However, it is worth noting that business models such as Spotify straddle both business-to-consumer (B2C) spend (when the user spends £5 or £10 per month to subscribe) as well as business-to-business (B2B) revenue (where the consumer makes no payment and advertising covers the rights bill). This distinction between B2C and B2B will prove important to the share of wallet in the future as consumer spend could fall while advertising-based revenues rise.

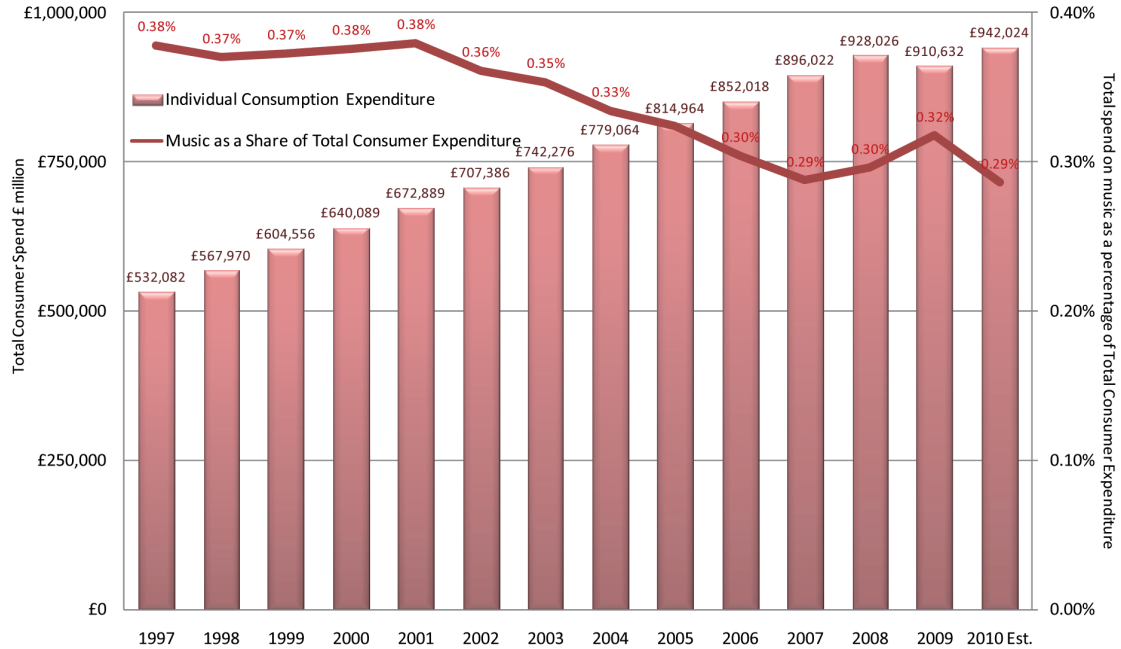
### Wallet share, illustrated

Two charts are presented overleaf to illustrate music's share of wallet from 1997 to 2010. The first chart plots total consumer expenditure on all goods on the left-hand axis and total music's share of expenditure in percentage terms on the right-hand axis. Total consumer expenditure can be seen rising constantly throughout the period in nominal terms, with the exception of 2009 when such spending fell by 2%.

Dividing consumer spend on live and recorded music by total consumer expenditure produces our share of the wallet, which remained around 0.38% between 1997 and 2001, then began a period of decline, losing almost over a quarter of its share before bottoming out at 0.28% in 2007. There was also a notable period of volatility in the recession year of 2009, with total consumer expenditure falling and spend on music increasing, meaning music wallet share increased. This bucked the trend and raises interesting

## Total consumer expenditure (LHS) and music's wallet share (RHS)

Source: ONS, PRS for Music, Imperial College

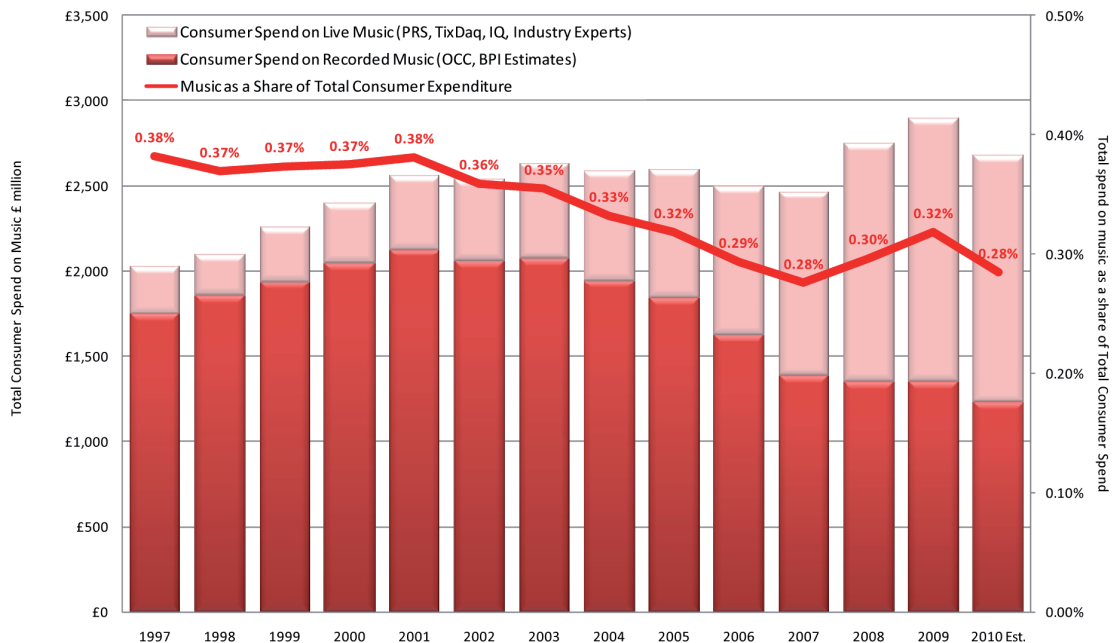


The chart below follows a similar structure but with total spend across both recorded (red) and live (pink) music presented on the left hand axis. Here you can see the dynamic shift in spending on CDs and tickets that took place over the period. Recorded music clearly has seen its consumer spend fall by a third, from a peak of £2bn in 2003 to something closer to £1.3bn now. Conversely, live music has seen incredible growth, especially in the latter half of the decade, and now

consistently out-earns (or out-spends) the recorded industry. The peculiarity of 2009 – the year when consumer expenditure fell but music’s wallet share grew – can also be understood further. In 2009 recorded music reported its first ‘flat’ year since 2003, whereas live carried on its upward trajectory apace, during the deepest recession of a generation.

## Total music revenues live and recorded (LHS) and music's wallet share (RHS)

Source: ONS, PRS for Music, Imperial College



## Historical insights

This historical analysis of music's wallet share allows for several observations, insights and cautionary notes to be drawn. The first observation stems from pooling live and recorded spend together and noting how stable the total UK spend on music has been from 2000 to the present day (at around £2.5bn in nominal terms). Secondly, this analysis allows us to consider how a budget constraint could force complementary and/or substitution effects. Has the growth in live helped off-set declines in wallet share as recorded revenues fell? Or has recorded music seen its share of wallet eaten away by live? Furthermore, has the live industry benefited from piracy and unbundling, with consumer money not spent on recorded music being available for live music? Finally, these observations can be set against real changes in the price of the respective goods. Albums cost £11.99 in 2000 and rarely cost more than £7.99 today, whereas festival tickets have not only grown in supply (more festivals, bigger capacity) but have more than doubled in price over the same period. For example, a full price ticket to T-in-the-Park has risen over the past decade from £75 to £195.

Causal links are a controversial topic for economists. There is no reason why both revenue streams cannot grow in tandem, as was the case for much of the pre-internet years and, equally, both trends could be reversed, as happened in 2010. However, it is worth noting that average-spend per UK recorded music buyer (which encompasses only 40 percent of the adult population) is around £60 per annum. Notably, major festival, stadium and arena tickets are now priced up to three times this amount. Over the past decade, most live venues have succeeded in supplying a greater number of shows, with increased capacities and at a higher price – and still selling out.

Another key insight we can take from this historical analysis is the role of inflation in the growth of income and expenditure over time. Deflating all three of the measures offered by the ONS over the 1997-2010 time period shows that the majority of the growth in expenditure was driven by inflation, with the minority suggesting a genuine wealth effect.

This current phenomenon of rising inflation amidst flattening real income is important as we turn to the future outlook in the next section. It is also important in terms of tying up the intuitive anomaly of the falling price of CDs: if consumers really did become wealthier since 1997 and, at the same time, CDs became visibly cheaper, then holding demand for the albums constant would have seen wallet share fall by default.

The internet and its impact on a consumer's willingness to pay needs to be considered. In the decade to 2010, broadband penetration went mass market in the UK, and recorded music has since lost 0.20% share of consumer expenditure. During the same period, live music gained 0.10% share of consumer expenditure. This divergence in wallet share might suggest that half of the savings people made by downloading music, via rapidly spreading broadband links, went on live music and half ended up in people's pockets to spend elsewhere.

There is one cautionary note to offer: 2010 numbers involved estimates for ONS total consumer expenditure as well as live and recorded spend. Whilst these estimates were carefully constructed, revisions could have a big impact amidst a wallet share measured in fractions of a percentage point.

More substantive conclusions from this historical analysis would need to consider a broader range of factors, beyond the scope of this paper: other entertainment goods, supermarket pricing, the growth of wholesale music licensing revenues, the launch of devices such as the iPod, the unbundling of the album, and also demographics - a large group of silver-somethings now have the time and means to spend money on the performances of heritage acts, acts whose popularity is a function of recordings purchased years ago.

We can also offer some economic theory as a toolkit to get one step closer to understanding the past and forecasting for the future (see box).

### Particular goods for peculiar times

There are three categories of goods that can help inform ideas on the peculiarities of 2009, where the industry may be heading, and how different parts of the business can be understood. When reading this section, imagine yourself as an average consumer. An example is provided with the first set to get the ball rolling.

If a consumer knows characteristics such as price and satisfaction before purchase, the product or service can be understood as a **search good**; if the consumer realises these only after purchase, it is an **experience good**. Recorded music may be a search good – the price of purchase is clear and the consumer can try the track(s) out before they buy. Live music may be an experience good – on-the-night spend and travel expenses are not certain at the point of purchase and there is little room to 'try before you buy'. Why is this important?

Firstly, search goods are more likely to be sensitive to price changes because price affects the cost-benefit of purchase. Secondly, search goods are more likely to have substitutes that compete for consumers' money since alternative spend

that compete for consumers' money since alternative spend can be identified and weighed against the good and competitors can compete on price.

If a consumer buys more of a good after an increase in income, it is known as a **normal good**; if they buy less following the same income rise, it is an **inferior good**. If income change has no effect on how much is purchased, it is a **neutral good**. The importance here is that identifying a product's reaction to income change may allow the prediction of likely future movements in the industry from forecasts on growth, interest rates and so on.

If a consumer buys less of a good following a rise in price, the good is known as an **ordinary good**; if they buy more of a good following a rise in price, it is a **giffen good**. Ordinary goods dominate and there is very little concrete evidence of giffen goods practically. How strongly a good is an ordinary good is still useful because if likely price change and how strongly ordinary the good is can be predicted, the effect on spend – and revenue – can be understood.

**Looking to the future, a squeeze on wallets from two fronts**

A significant factor facing wallets in the months and years ahead is the risk that the rate of inflation will remain above interest rates for some time. According to the HM Treasury's monthly *Survey of Independent Forecasters*, not even one of the twenty-six organisations surveyed predicted that central bank interest rates would reach more than 3% by 2012 Q4<sup>3</sup>. The median forecast is for rates of 2%, with Capital Economics pegging interest rates at the current historic low level of 0.5% for the next eight quarters. Conversely, there is a broad consensus that RPI inflation will exceed 3% in 2012 Q4. The median forecast is 3.2%, while Citi Group forecasts 4.4% at the end of next year.

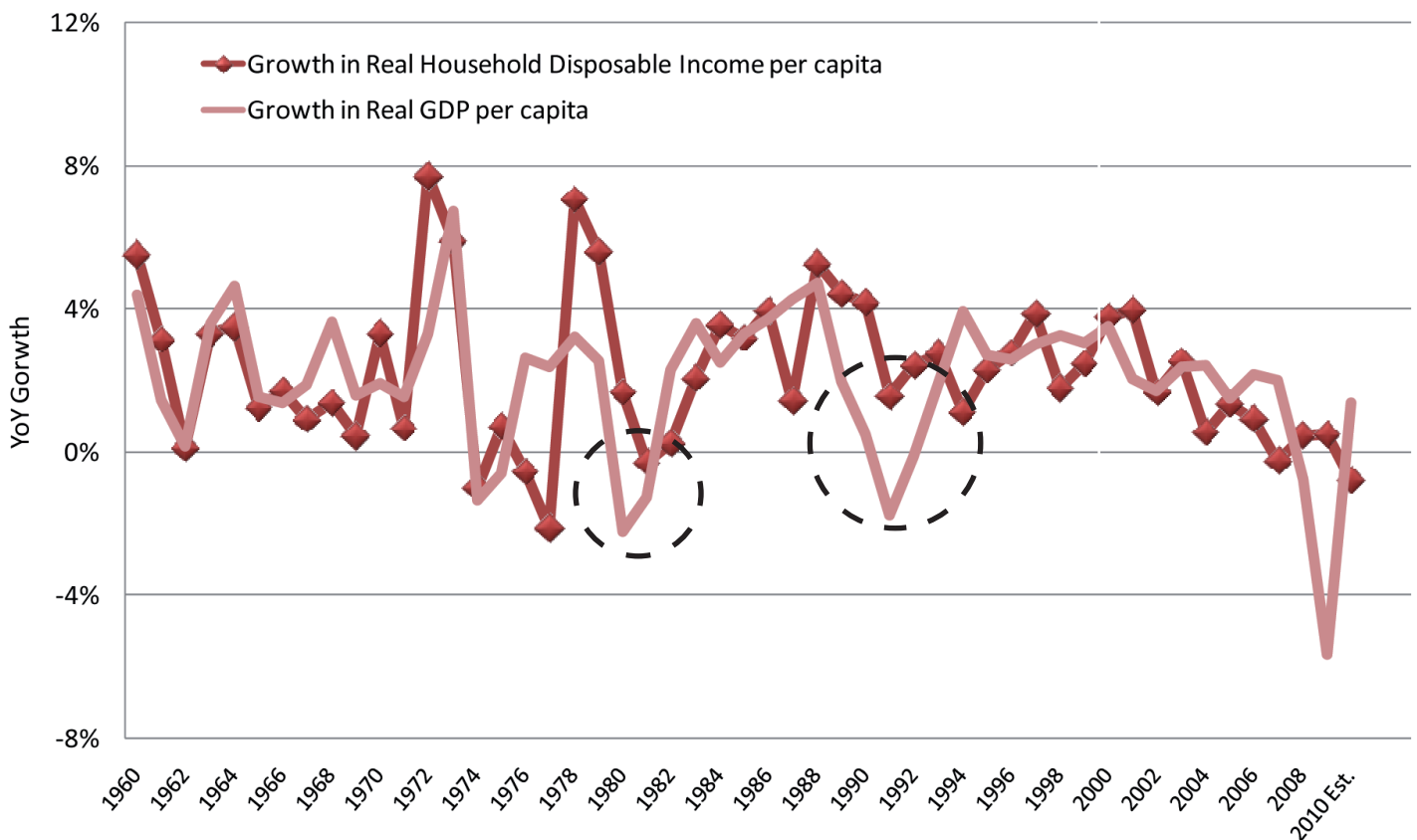
What seems increasingly likely is that this inflation problem on savings will be compounded by an erosion effect on earnings as well. For the consumer, it is already the case that all easy access savings accounts offered by retail banks in the UK are losing the consumer money in real terms, with interest rates rarely exceeding 1% and inflation now exceeding 4%, and rising. Forecasting the likely path of RPI seems like a one-way bet. The Bank of England core target measure is CPI (which excludes mortgage payments) and, if interest rates are hiked to meet this target, then this risks pushing up RPI further (which includes mortgage interest payments) causing divergence and increasing inflation.

The chart below illustrates the problem, in real per capita terms, plotting the historical annual growth rate in real GDP per capita and real household income per capita from 1960 to 2010. In the previous recession, household income outperformed GDP (witness the gap between the two lines during the early 1980s and the early 1990s); however, this time round it could be different. The UK economy has exhibited a sustained period of weakness in household income since the credit crunch hit and has shown hardly any real growth between 2007 and 2009. GDP per capita nose-dived in 2009 and official ONS estimates for 2010 are for little more than 1% growth, which leaves the absolute value of GDP per capita at the same level as five years ago.

We need to further investigate the historical impact of these macroeconomic factors upon the music industry - particularly with that industry broadly defined - so as to better understand the complex links between live and recorded music markets, retail and broadcast channels, as well as the overall production and consumption of music. *PRS for Music* will be working with a range of individuals from business, policy and academic settings in the coming months, in order to develop these insights.

**Growth in real household disposable income and real GDP per capita; 1960 to 2010**

Source: ONS and Imperial College 2010 estimate



<sup>3</sup> HM Treasury (March 2011) *Forecasts for the UK economy: a comparison of independent forecasts*.

### A long period of 'bumping along the bottom'?

If the data depicts reality, then what we know is that GDP per capita has fallen back to its 2005 level and household income has been flat and looks set to persist. At the margin, there are three events which could compound the problem even further. These events all stem from and revolve around the issue of fiscal tightening, which is currently being off-set by loose monetary policy. The strategy, it seems, is to ensure the latter avoids another Minsky moment, whereas the former is designed to balance the books. This macroeconomic strategy is risky, given the compounding effect of the following three events:

- **Fiscal:** the hike in VAT and the freeze in public sector pay will depress household income.
- **Tax:** 'creeping' effective tax rates and benefit withdrawal will reduce household income.
- **Oil:** higher non-core consumer prices will absorb more household income.

Of course, there are optimistic scenarios that could off-set these effects. Intuitively, some costs may decline, pulling down inflation; the wide margin on mortgages could contract and release cash flow with it; and, finally, private sector pay could accelerate (well) ahead of inflation and, with it, domestic demand could recover. However, while these countering effects are plausible, if they were to happen they would take time to deliver real effects. Conversely, the three events listed above are happening now and are compounding an already sustained period of weakness in household incomes. This order of events helps to explain why this economy is in for a long period of 'bumping along the bottom'.

### Where now for the market, and the music industry?

Some practical considerations that arise from this work relate to the basics of price and quantity within the UK music industry. For the live industry, if the market managed to support the supply of festivals last year alongside increased ticket prices, does that mean it can sustain this going forward? The decline in live music in 2010 was partly a result of supply (e.g. had Take That toured in 2010, the numbers might not have been down) but also demand. This makes one question how sensitive the market is to price. That said, there is a distortionary lag-effect since many people purchase festival and stadium tickets a year in advance - the market may have turned down in 2009, waiting to take its toll in 2010.

For recorded music, this analysis provides an original angle as to what has been eating away its wallet share, with evidence to suggest that two events – the internet and ticket prices – could explain part of the decline. However, when UK consumers decide an album is a hit, those hits still sell well: the Kings of Leon's *Only by the Night* sold an impressive 2.6m copies in the UK alone. Another angle the recorded music industry could take would be to consider its objective: is it to simply 'sell more records', or hold wallet share constant? The latter leans into the debate about subscription and services like Spotify, and it would be interesting to repeat this analysis for BSkyB which has arguably mastered this art.

Of course, the dismal science has a silver lining if we think about these particular goods in peculiar times. UK music, and media more generally, might see an uptick in demand as a result of the prolonged squeeze on consumers' spending power. Within the live sector, what if festivals are actually in direct competition with short European breaks? If so, then the squeeze on wallets could curtail these away breaks, freeing up new money to be spent on festivals at home. This is where observation and causation loses its boundaries, since the industry can reconsider what it is competing for (money, attention, emotion) and then what it is actually competing with (entertainment, travel, Inland Revenue).

Music is not alone in this quandary and all other areas of media should be considering this timely issue. For example, the movie industry may find itself at a similar crossroads. Take the monthly movie subscription service Lovefilm for example, which aims to follow the success of Netflix in the US. As with any all-you-can-eat proposition, Lovefilm finds itself confronted with the question of cannibalisation all the time. At a recent conference, its CEO, Simon Calver, was asked who Lovefilm sees itself in competition with to get a share of the consumers' monthly wallet. His response was as unexpected as it was enlightening: 'gardening products'.

### Acknowledgments

The author would like to thank Imperial College and the Intellectual Property Office Copyright Expert Advisory Group for providing a catalyst for this work as well as wider collaborations.

The author would also like to thank Chris Haynes (*PRS for Music*), Chris Green (BPI), Andrew Bud (mBlox), David Touve (Washington & Lee University), Stewart McKie (Strathclyde Business School), Chris Deering (Former President of Sony Europe), Jakob Hüttel (KODA), George Magnus (UBS), Jon Moulton (Better Capital) and Bill Gorjance (peermusic Publishing) for their comments and contributions.

Finally, thanks to *PRS for Music* colleagues Lisa Eaton and Anita Awbi for proofing the document and Steve Cole for producing this Economic Insight paper.