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Understanding the Gender Gap in Financial Well-Being

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Understanding the Gender Gap in Financial Well-Being

Evidence of a Gender Gap in Financial Well-Being in EU Member States

Bróna Ní Chobhthaigh

Abstract

Increasingly, evidence of a gender gap in a range of economic and social contexts alongside a gender wage gap, has been demonstrated. An element of this can be considered through the body of economic, social and behavioural literature which highlights a gap between genders in their financial experiences and their ability to meet their financial needs – also referred to as financial well-being. This study uses EU time-series survey data to investigate how a gender gap manifests in indicative components of financial well-being – experience of prices and risk, and expectations on spending and saving. Understanding different dimensions of this gender gap and determining how much is due to differences in income and financial situation, provides practical insights into potential policy interventions. Results indicate a persistent gender gap in key indicators of financial well-being, measured through male and female experience of changes in prices and risk aversion. This gap is not explained by a gap in income or financial situation, and indicates potential market, institutional or other, structural differences. Further analysis is warranted to continue to build understanding and inform the design of appropriate policy responses.

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1. INTRODUCTION AND MOTIVATION

Financial well-being is the ability of people to manage their finances without stress and to meet their financial commitments and needs comfortably, and with enough financial resilience to respond to short-term shocks, regardless of income levels. In the wake of the 2008 financial crises, policy and regulatory functions have actively sought to support and increase individual financial well-being, through addressing the structural aspects which underpin it – consumer rights, financial literacy and trust in institutions, as well as access to robust lines of credit and support services. This study draws on EU time-series survey data from the European Commission Business and Consumer Survey, to investigate how a gender gap manifests in household and individual experience of both personal financial and macro-economic factors.¹ Understanding different dimensions of this gender gap and determining how much can be explained by income or financial situation, provides practical insights into the parts of the gap which can be addressed through policy interventions at source.

A growing body of economic, social and behavioural literature demonstrates evidence of a gender gap in a range of financial experiences. Increasingly, these experiences are recognised as key components in economic and financial policy-making given the impact they have on individual and household financial well-being –an important goal of financial policy (European Commission 2017; CFPB 2015).² Evidence of a gender gap in these particular financial contexts demonstrates more broadly evidence of a gender gap in financial well-being. And, although an aspect of this gap will be due to income and financial situation, because financial well-being relates to a state of being in a personal financial context, there will also be broader components to the gap which may be market-driven, preference-based, cultural, social or otherwise.

There are also traditional measurement challenges to understanding gender gaps. Measurement is generally a recent phenomenon and cross-country, cross-time analysis has been limited. It has largely focused on measuring “outcomes” (the results of gender gaps), limiting the design of policy interventions to address outcomes rather than the market, preference, cultural or social elements underpinning a gap.

Increasingly, survey data provide in-depth insights particularly with regard to understanding respondents’ perceptions and experience of economic and social contexts or issues. These sorts of insights enable analysis of the policy, cultural, and social factors which shape individuals’ actions and behaviours and approaches to living their lives, the results of which are ultimately measured through economic and social outcomes. Insights on how a gender gap manifests through lived realities would provide further understanding on how cultural and social norms and the evolution of these norms, either through social change, or policy design affect women’s experience.

The purpose of this study is to develop understanding of gender gaps further by interrogating how a gender gap in financial well-being manifests at a micro experience level, across countries and across time periods. Drivers of this gap will be income and financial situation, because financial well-being relates to a state of being in a personal financial context, and also broader components which may be market-driven, preference-based, cultural, social or otherwise. By combining hypotheses developed from a rich evidence base on different types of gender responses to financial contexts, with analysis of a robust and extensive long-term cross-country survey dataset, this paper circumvents the traditional

¹https://ec.europa.eu/info/business-economy-euro/indicators-statistics/economic-databases/business-and-consumer-surveys_en

² The Consumer Financial Protection Bureau in the United States was established under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010. In-depth qualitative research and evidential review undertaken by the Consumer Financial Protection Bureau (2015), lends the definition of financial well-being as a state of being where individuals "Have control over day-to-day, month-to-month finances; Have the capacity to absorb a financial shock; Are on track to meet ...financial goals; "Have the financial freedom to make the choices that allow [you] to enjoy life".

data challenges in gender gap analysis, and provides insights into how different financial constraints differently affect men and women. The results of this paper provide micro-founded evidence for significant gender gaps in a number of indicators of financial well-being.

Understanding how financial well-being differs by gender starts to reveal the barriers and challenges more experienced by women, than by men, which in turn supports consideration of the need for policy responses to either address and correct underlying market issues, or mitigate the effects of different social expectations or requirements by gender.³ The paper determines the building blocks of the gender gap in financial well-being, and decodes different dimensions to better inform policy designed to address the underlying structural factors. If there is a demonstrable gender gap in experience, or expectations, of prices, then there are clear options for market or commercial interventions for sales of goods and services, or a potential role for building trust in national and supra-national financial institutions. If there is a demonstrable gender gap in risk aversion, then there may be behavioural aspects at play which could be potentially addressed through incentivising equitable financial products and supporting financial literacy. If there is a demonstrable gender gap in spending preferences, again, there may be behavioural aspects at play which may require market regulation in order to ensure equitable consumption outcomes between the genders. And, if there is a demonstrable gender gap in savings preferences, there may be fundamental issues in access to financial products, financial literacy, or trust in national and supra-national financial institutions.

This paper proceeds as follows; Section Two reviews the evidence base on gender gaps in financial experience and details the four hypotheses tested. Section Three outlines the survey data used and covers the analytical approach taken, Section Four presents the results and Section Five concludes.

2. EVIDENCE FROM THE LITERATURE AND DEVELOPING FOUR HYPOTHESES

2.1. GENERAL FINDINGS IN THE LITERATURE

Evidence of a gender gap is well established in a range of economic and social contexts. To capture this, international institutions increasingly measure and report on an over-arching gender gap using a range of composite indices.

The World Bank (Posadas et al 2017) measure gender differences in outcomes in human capital, economic opportunities and, voice and agency. The World Economic Forum (WEF) report annual results which rank countries on the basis of four indices: economic participation and opportunity, educational attainment, health and survival and, political empowerment. The IMF reports on gender equality through the Gender Development Index and the Gender Inequality Index. The former aggregates indices on life expectancy, education and GNI per capita. The latter aggregates reproductive health, empowerment and economic status expressed as labour market indices. The Gender Inequality Index is the same index tracked and reported by the United Nations. The EU's European Institute for Gender Equality (EIGE), reports a Gender Equality Index through measuring access to work, money, knowledge, time, power and health services. The Equal Measures (EM) 2030 Sustainable Development Goal Gender Index measures gender equality across 51 indicators across 14

³ Further discussion is warranted around whether or not differences in financial outcomes require policy responses. Understanding how a gender gap in financial well-being results from different interactions with market structures, or from different life expectancies, or from different social structures (and with that different expectations or requirements) goes towards informing the argument around what differences require corrective policy responses, and what differences may require social change or otherwise.

of the United Nations 17 Sustainable Development goals, including indicators which are gender-specific and which have a disproportionate effect on girls and women.

Regardless of the gender differences observed, the local and macro-economic impacts of gender inequality are increasingly well documented. Elborgh-Woytek et al (2013) provide an overview of the literature highlighting GDP per capita losses of up to 27% in certain regions as attributable to gender gaps in the labour market. The World Bank (Wodon and de la Brière 2018) estimate potential global gains in total wealth of 14% with gender equality in earnings. While the proportional increase in economic growth is less in countries starting from a more equitable base than those with higher levels of gender inequality, the gains extend to developed countries as well; Thévenon et al (2012) find that a more equal ratio of education by gender would boost economic growth in OECD countries, and even EU Member States with already high levels of gender equality, could access economic gains of up to 4% of GDP with further improvements in equality (EIGE 2016).

Evident across the literature, is that the findings are relevant in both developing and developed countries. While an overarching gap may be more pronounced in some developing countries, as evident from the WEF rankings outlined in Table 1 below, there is a considerable variation between OECD, EU, G7 and G20 countries.

Table 2.1. **Group Membership and Global Gender Index Rankings**

| Country | OECD | G7 | G20 | EU | WEF 2018 Global Gender Gap Index Ranking | EM SDG 2019 Gender Index Ranking |
|-----------|------|----|-----|----|--|----------------------------------|
| Argentina | - | - | Y | - | 36 | 47 |
| Australia | Y | - | Y | - | 39 | 10 |
| Austria | Y | - | - | Y | 53 | 13 |
| Belgium | Y | - | - | Y | 32 | 15 |
| Brazil | - | - | Y | - | 95 | 77 |
| Bulgaria | - | - | - | Y | 18 | 27 |
| Canada | Y | Y | Y | - | 16 | 8 |
| Chile | Y | - | - | - | 54 | 39 |
| China | - | - | Y | - | 103 | 74 |
| Croatia | - | - | - | Y | 59 | 26 |
| Cyprus | - | - | - | Y | 92 | NA |
| Czechia | Y | - | - | Y | 82 | 20 |
| Denmark | Y | - | - | Y | 13 | 1 |
| Estonia | Y | - | - | Y | 33 | 18 |
| Finland | Y | - | - | Y | 4 | 2 |
| France | Y | Y | Y | Y | 12 | 14 |
| Germany | Y | Y | Y | Y | 14 | 7 |
| Greece | Y | - | - | Y | 78 | 29 |
| Hungary | Y | - | - | Y | 102 | 35 |
| Iceland | Y | - | - | - | 1 | NA |
| India | - | - | Y | - | 108 | 95 |
| Indonesia | - | - | Y | - | 85 | 69 |
| Ireland | Y | - | - | Y | 9 | 9 |
| Israel | Y | - | - | - | 46 | 31 |
| Italy | Y | Y | Y | Y | 70 | 19 |
| Japan | Y | Y | Y | - | 110 | 21 |

| | | | | | | |
|-----------------|---|---|---|---|-----|----|
| Korea | Y | - | Y | - | 115 | 41 |
| Latvia | Y | - | - | Y | 17 | 25 |
| Lithuania | Y | - | - | Y | 24 | 24 |
| Luxembourg | Y | - | - | Y | 61 | NA |
| Malta | - | - | - | Y | 91 | NA |
| Mexico | Y | - | Y | - | 50 | 64 |
| Netherlands | Y | - | - | Y | 27 | 5 |
| New Zealand | Y | - | - | - | 7 | 11 |
| Norway | Y | - | - | - | 2 | 4 |
| Poland | Y | - | - | Y | 42 | 30 |
| Portugal | Y | - | - | Y | 37 | 16 |
| Romania | - | - | - | Y | 63 | 43 |
| Russia | - | - | Y | - | 75 | 59 |
| Saudi Arabia | - | - | Y | - | 141 | 92 |
| Slovak Republic | Y | - | - | Y | 83 | 22 |
| Slovenia | Y | - | - | Y | 11 | 6 |
| South Africa | - | - | Y | - | 19 | 71 |
| Spain | Y | - | - | Y | 29 | 23 |
| Sweden | Y | - | - | Y | 3 | 3 |
| Switzerland | Y | - | - | - | 20 | 12 |
| Turkey | Y | - | Y | - | 130 | 70 |
| UK | Y | Y | Y | Y | 15 | 17 |
| United States | Y | Y | Y | - | 51 | 28 |

Source: Equal Measures 2030, 2019 SDG Gender Index; World Economic Forum, Global Gender Gap Report 2018

2.2. GENDER GAP IN FINANCIAL WELL-BEING: DEVELOPING FOUR HYPOTHESES

While there is some literature which finds no differences between men and women in their expectations of future financial conditions (Fitzsimmons and Wakita 1993), there is a broader body of literature which demonstrates differences in how men and women directly perceive financial issues. Hira and Mugenda (2000) find gender differences in personal satisfaction with finances, and Wilhelm and Varcoe (1991) find significant differences between the genders including in the determinants of their perceived financial situation. Furthermore, there is also evidence which demonstrates that men and women differ in how they perceive time (Cottle 1976), which subsequently underpins gender differences on perception of current financial situation and expectation of future financial condition. These gaps demonstrate the foundation of a gender gap in financial-wellbeing indicators.

Four hypotheses are tested: evidence of a gender gap in prices; evidence of a gender gap in financial risk aversion; evidence of a gender gap in spending preferences; and evidence of a gender gap in saving preferences. Each of these hypotheses captures an indicative component of financial well-being which can be measured and assessed from available data.

However, given that financial well-being encompasses each of these indicators which combine to provide insights on individual or household, financial experience, the interplay between the four, and the composite indication they give on financial well-being, should also be considered. Standard economic theory would demand that respondents be rational – if respondents report that they expect less spending, that they would then be expected to report more savings, or less savings with an

expected reduction in income overall. However, it is possible that respondents might report both spending more and lots of savings. This combination could be due to an expected increase in income, an overly optimistic outlook or it could demonstrate an inherent financial inconsistency.

This highlights the complexity of understanding the variations in male and female experiences of financial well-being. Differences in how the genders respond across questions which may appear to be rationally linked with each other, might demonstrate that men expect to earn higher future incomes, thereby enabling both higher spending and higher saving, or it might highlight a gender gap in financial literacy, demonstrated across individual and country level incomes in a broad body of literature (OECD 2015; Preston and Wright 2018; Potrich, Vieira and Kirch 2017). Understanding the interactions between the different factors of which financial well-being is comprised, will help support nuanced and effective policy design to address these structural elements.

2.2.1. Evidence of a Gender Gap in Prices

How prices trend impacts on financial well-being through potential unpredictability or limitations on the ability to choose desired goods or services. A gender gap in prices may be evident through differences in experience of price increases or decreases, or differences in future price expectations. These differences in prices may be due to inherent gender bias, to variations in costs of production, or to market competition.

Early work which informed the Californian Gender Tax Repeal Act of 1995, estimated that women effectively paid an annual "gender tax" of approximately €1,351 for the same services as men. Ayres and Siegelman (1995) found that white males were both quoted, and then ended up paying lower prices in car dealerships than white females, black females and black males in Chicago. More recent academic papers continue to build the evidence of differences in price experience by gender in the automobile industry with Machelett (2018) finding that women receive price quotes which are 1.9% higher than men in the American automobile repair industry. Fitzpatrick (2017) expanded the work on price differentials to a new market and demonstrated that women are presented with initial higher prices than men but then are more successful at bargaining prices downwards, making final paid prices equal to those of men, in the antimalarial drug market in Uganda. An extensive study of consumer pricing in New York City across 5 different industries (De Blaiso and Menin 2015) found that women's products on average cost 7% more than similar products for men – ranging from 4% more for children's clothing up to 13% more for personal care products. An overarching report undertaken by the US Government Accountability Office (2018) built on this and concluded that price differences exist for the same products targeted at different genders.

Differences in understanding of prices may then be due to inherent bias, variations in costs, or they could be picking up gender differences in the household budget holder. If more women are more likely to manage the household budget, it could be that gender differences in understanding and experience of prices are picking up a closer reality of actual prices. It could also be that women have tighter budgets and have less opportunities to substitute away from goods with higher inflation. Any analysis which furthers insights into the differences in gender experience or understanding of prices has immediate relevance for local, national and international consumer and economic issues, as well as providing insights into gender gaps in financial well-being.

2.2.2. Evidence of a Gender Gap in Financial Risk Aversion

There is considerable evidence that there is a gender difference in risk perception. An evidential review by Gustafson (1998) highlighted the substantial evidence for risk differences between genders across quantitative and qualitative approaches, though the results on perceptions of risk can differ. Risk perception has also been demonstrated to indicate broader social or cultural experiences; Flynn et al (1994) found that white-men perceive environmental risks to be smaller and more acceptable than women and non-white respondents – highlighting the potential role power and ownership play in risk perception.

Gender differences in risk around financial decisions have also been demonstrated, with clear implications for financial outcomes for both individuals, and at the aggregate. Charness and Gneezy (2012) assembled comparable data across countries (including the US and Sweden) and payment types, and found a "substantial and consistent" difference in investment choices by gender outlining that women make smaller investments than men in risky assets, indicating that they are more financially risk averse than men. An experiment directly testing ambiguity in the Netherlands (Borghans et al 2009) finds that women are more risk averse than men, with psychological variables demonstrated as responsible for some of this variation. Powel and Ansic (1997) find that irrespective of ambiguity or costs or familiarity, women are less risk seeking than men. Further evidence suggests that men are significantly more optimistic than women when it comes to considering the economy and financial markets (Jacobsen et al 2014), and that there may be cultural factors underpinning the risk related gender aspect (Olsen and Cox 2001).

Differences in risk aversion for financial decisions, or investments, may manifest in differences in trust about future economic context. Any analysis which furthers understanding of the differences in gender financial risk aversion, particularly with respect to beliefs or trust in the future macro-economic context, provides insights into the lived financial reality of households and individuals.

2.2.3. Evidence of a Gender Gap in Spending Preferences

Gender differences have also been demonstrated in spending behaviours. A gender gap in spending preferences can come from a range of factors, from different commitments to household spending between male and female budget holders, to higher proclivity to unplanned spending. This can have an impact on an individual's financial well-being through either limiting their ability to plan or feel financially secure given unpredictability, or due to different inclinations to spending. This may run parallel to a gender gap in prices, as well in income. Hira and Mugenda (2000) measured differences in types of spending behaviour of US consumers, with women respondents twice as likely to report buying in general without any real need, buying specific items they actively don't need, as well as making unplanned purchases. Nanadan and Fernandez (2017) assess spending habits of males and females in India finding evidence that gender is a fundamental factor in spending attitudes and behaviour, regardless of income. Testing spending preferences might shed some further light on the nature of this gender gap.

2.2.4. Evidence of a Gender Gap in Saving Preferences

A gender gap in savings has also been well-demonstrated in the literature. A gap in savings preferences may also be captured as a gap in expectations about savings – lower savings preferences would be likely to translate into lower expectations about potential future savings. This is somewhat similar to the gender gap in risk aversion, and captures an aspect of financial well-being which is

about security and building the capacity to absorb a financial shock. This hypothesis may also capture an element of personal pessimism or optimism about future economic ability (either personal, or related to the macro-economic climate) or about whether there may be other sources of income.

Fischer (2010) used US data and found that poor health and low risk tolerance both negatively impacted on likelihood to save in women, but not in men, while higher education levels increased men's likelihood to save. Fisher et al (2015) developed this original 2010 research, which drew from a dataset with predominately high-income earners and demonstrated that even in low and moderate income households, savings behaviour still differed by gender.

3. DATA AND ANALYTICAL APPROACH

3.1. CHALLENGES IN MEASURING GENDER GAPS

Despite the gains in measurement and reporting in recent years, and the increasing attention at the academic level of the variations in the manifestation of gender gaps, there are still a number of challenges which impede connecting the available data and academic analysis with the applied policy space to address these gaps.

The availability of long-term stable and consistent data sets which provide an overview of a range of gender gaps is narrow, limiting the opportunity to make comparisons over time and against policy interventions or social or cultural shifts. While the WEF data has been compiled and reported on an annual basis and under a stable methodology from 2006 to 2018, this appears to be the exception. Many of the international indices on an overarching gender gap are irregular and non-continuous; the EIGE Gender Equality Index was published for 2005, 2010, 2012 and 2015, and although continuous from 1990, the latest publication for the IMF database appears to be for 2013. Furthermore, while the Equal Measures Sustainable Development Goals Gender Index is cohesive, and will likely be published going forward, the 2019 publication is the first.

Secondly, the role of income and financial status plays an integral part in gender gaps, is complex and must be unpicked.

The evidence that women on average have lower incomes than men over their lifetime and, are more likely to be on a lower income than men, is well established. Women are also more likely to live with a higher earning partner than men are, and the financial decisions they make for either themselves, or on behalf of a household, may be different because of this. Women may also have different financial preferences regardless of partner income. Evidence from the literature highlights the fundamental role of gender in financial attitude (Nanadan and Fernandez 2017) indicating the cultural and social aspects which may underpin financial preferences.

Income and financial status are also highly interrelated with education levels, access to health and labour force participation. To account for this interplay, the overarching international gender gap indices outlined, account for income levels either explicitly, or as a component of a broader economic index which is factored into measurement. This approach captures the inherent variation due to income, and enables comparison of average national income by gender within a country, or between countries overtime. However, understanding the components of gender gaps which are outside of income, remains limited. And, understanding how income may exacerbate broader financial elements of a gender gap, is also limited.

And finally, although the IMF also measure countries' propensity towards gender budgeting, thereby picking up policy design, and the Equal Measures dataset approach of assessing gender aspects of the Sustainable Development Goals inherently captures design, the international indices available generally measure gender gaps in terms of "outcomes" i.e. the results of social or cultural factors, or policy decisions rather than the designs of the systems which generate them. This paper uses internationally comparable survey data to overcome these challenges.

3.2. DATA

This paper uses data from the EU Joint Harmonised Business and Consumer Survey (BCS) Programme, which gathers responses from approximately 40,000 consumers across Europe about their personal finances as well as their experience of macro-economic developments.⁴ Twelve questions are posed on a monthly basis, a further three on a quarterly basis. The questions and the analytical methodology, are harmonised across all countries, ensuring that the results are comparable across EU Member States.

While the BCS dataset is most commonly used for business cycle analysis, it offers rich opportunities for exploration of broader social and economic questions. Duca et al (2019) used the survey data to assess whether higher inflation expectations lead to more consumer spending and Reuter (2016) explored the breadth of the dataset to understand inequality. As well as outlining a new approach for extracting information on inequality from the results of the surveys, using data on different income and demographic subgroups, Reuter (2016) also tested the validity of interrogating the survey questions for broader social and economic analysis outside of the standard forecasting and index use. This use has particular relevance to research on the gender gap in financial well-being, as the paper firmly established the potential of the questions on financial situation as robust markers of income and wealth. This is particularly pertinent, given the weight that income holds in accurately measuring any element of a gender gap.

Reuter (2016) also highlighted the advantages of using BCS survey data which, along with further benefits, are again relevant for the purpose of exploring gender gaps further:

- 1) Results for each question are calculated on the basis of the difference between positive and negative answer options as a percentage of total answers, yielding monthly data on a scale of positive or negative sentiment, or more or less agreement, with a particular statement. This is referred to as the "balance statistic" which provides insights into the emotional sense of respondents as well as their perceptions and experience.⁵
- 2) The data are seasonally adjusted ensuring that the respondents' natural inclination to implicitly vary their responses due to seasonal changes (e.g. Christmas, public holidays etc.) is accounted for.
- 3) The data are available without any major time-lag ensuring that analysis reflects immediate consumer or business response to, and experience of, economic or policy changes in their country.

⁴https://ec.europa.eu/info/business-economy-euro/indicators-statistics/economic-databases/business-and-consumer-surveys_en

⁵ Balances are the difference between positive and negative answering options, measured as percentage points of total answers. If a question has three answer options, "positive" (P), "neutral" (E) and "negative" (M) and if P, E and M (with P+E+M=100) denote the percentages of respondents having chosen respectively the option positive, neutral, and negative, the balance is calculated as $B = P - M$. If a question has six answer options, "very positive" (PP), "positive" (P), "neutral" (E), "negative" (M), "very negative" (MM) and "don't know" (N) and $PP+P+E+M+MM+N=100$, the balances are calculated on the basis of weighted averages as $B = (PP + \frac{1}{2}P) - (\frac{1}{2}M + MM)$. For further detail please refer to the BCS User Guide at http://ec.europa.eu/economy_finance/db_indicators/surveys/documents/bcs_user_guide_en.pdf

- 4) The results are generated by the same methodology and are comparable across all EU member states – albeit with starting dates varying depending on accession date.
- 5) Consumer level data is gathered on the basis of gender of respondent which allows for comparison of responses by gender within a country, between countries and overtime.
- 6) The dataset includes a question which captures a respondent's assessment of their current financial situation, ensuring that analytical work on financial well-being captures an individual's sense of how they are financially, outside of objective income measures.
- 7) The dataset includes a question which captures a respondent's income quartile, ensuring that any analytical work on gender gaps accounts for the well-documented differences in income, wealth or overall socio-economic status between genders.⁶

Given the provision of gender-based responses on economic experience and preferences, within EU member states over time, and under a harmonised approach between EU member states, the potential to explore and understand the cultural, social and policy aspects which underpin the gender gap in financial well-being through the EU Joint Harmonised Business and Consumer Survey Programme is evident.

Survey questions were used to test the four hypotheses:

- Hypothesis 1: Whether a gender gap in prices is evident is tested through Question 5 "How do you think consumer prices have developed over the last 12 months?" and Question 6 "By comparison with the past 12 months, how do you expect consumer prices will develop over the next 12 months?".
- Hypothesis 2: whether a gender gap in risk aversion is evident is tested through Question 8 "In view of the general economic situation, do you think that now it is the right moment for people to make major purchases such as furniture, electrical / electronic devices etc.?" Respondents who are less likely to recommend a given economic climate as the right time for major purchases are demonstrating higher levels of risk aversion.
- Hypothesis 3: whether a gender gap in spending preferences is evident, is tested through Question 9 "Compared to the past 12 months do you expect to spend more or less money on major purchases (furniture, electrical / electronic devices etc.) over the next 12 months?" To some extent, this question implicitly captures respondents' financial ability to spend on major purchases given the comparison with their own previous period, and reflects more their spending preferences, rather than spending ability.
- Hypothesis 4: whether a gender gap in savings preferences is evident, is tested through Question 11 "Over the next 12 months how likely is it that you save any money?"

3.3. ANALYTICAL APPROACH

Analysis tested for a gender gap in financial well-being, through assessing the difference in the balance statistics between genders for each of the five countries across June 2003-March 2019.⁷ The difference between the monthly male and monthly female balance statistics was calculated for each question. A three-month moving average of the difference was then calculated to smooth out fluctuations and assess a longer-term trend. A gap in the balance statistics and a non-neutral difference between the male and female balance statistics indicated a real gap in terms of financial well-being.

⁶ It should be noted that income quartiles themselves can contain considerable variation within a quartile, particularly at the higher and lower end of the scale.

⁷ For further details on the calculation of the balance statistics please refer to the Business and Consumer Surveys User Guide available at

http://ec.europa.eu/economy_finance/db_indicators/surveys/documents/bcs_user_guide_en.pdf

Given the breadth of the survey data available, this study focuses on five countries in the EU, with the potential to expand the analysis to a broader geographical base. Countries were picked to ensure appropriate sample size in the data and to provide an overview of varying cultural contexts across the EU.

Table 3.1. **Key Statistics for Countries under Analysis**

| Country | | Date of Accession to the EU ^a | GDP per capita current prices* | Difference in Male-Female labour force participation rate ** | EU Income Inequality Ranking *** | EU Gender Equality Ranking (WEF data) **** | World Gender Equality Ranking (WEF data) **** | SDG Gender Equality Ranking ***** |
|----------------|-------------------------|--|--------------------------------|--|----------------------------------|--|---|-----------------------------------|
| France | Large Western | 1952 | € 35,100 | 6.9% | 13 th | 5 th | 12 th | 14 th |
| Italy | Large Southern | 1952 | € 29,100 | 18.2% | 23 rd | 22 nd | 70 th | 19 th |
| Poland | Large Eastern | 2004 | € 12,900 | 13.6% | 15 th | 17 th | 42 nd | 30 th |
| Romania | Medium Eastern/Southern | 2007 | € 10,400 | 18.1% | 27 th | 21 st | 63 rd | 43 rd |
| Finland | Small Northern | 1995 | € 42,300 | 3.3% | 3 rd | 2 nd | 4 th | 2 nd |

Source: * Eurostat 2018; ** Eurostat activity rates by sex, age and citizenship 2019 Q1; *** Eurostat income quintile share of ratio of inequality of income distribution 2017; **** World Economic Forum, Global Gender Gap Report 2018; ***** Equal Measures 2030, 2019 SDG Gender Index

3.3.1. Two Rounds of Analysis

Two rounds of analysis were undertaken to test the four hypotheses outlined. Statistical significance of the balance statistic differences was tested for country level results through linear regression of the difference on a constant under both rounds of analysis.⁹ The four hypotheses outlined were tested individually, and then considered in the round to provide overarching insights into financial well-being.

Under the first round of analysis, a gender gap in financial well-being was tested for through analysing the average of the difference in the balance statistics for each of the five countries from June 2003-

⁸ BCS data availability does not correspond exactly with EU Accession dates, given the early collection for some members. For the sake of consistency and comparability over time, only a corresponding time period was used for the analysis, starting the series with a three-month moving average from June 2003, except for France. Analysis on income and financial situation is reported on from February 2004 for France with missing variables for August 2004, 2005, 2006 and 2007.

⁹ Aggregate averages which were calculated as means across the five countries for all available years are also reported. The statistical significance of these aggregate averages are not included, but this was solely due to practical challenges, and timing / programmatic constraints, rather than any data or analytical restrictions.

March 2019. These average trends over time were assessed to identify whether there is a gender gap, the magnitude of that gap, the persistence of that gap, and whether there is any convergence between genders over time. Charting country trends against each other, enabled cross-country comparison of the magnitude of the gap and cross-country convergence over time.

The persistence of gaps identified in this first round, was then tested against the introduction of controls for income and financial situation. Given the underpinning role income and financial situation play in financial well-being, and the evidence that women and female-led households have average lower income levels over time than male, financial situation or income of a household is likely correlated with gender. The combination of these two considerations means that the income effect for a gender gap may be exacerbated in our analytical context. That is, in the full set of respondents, there are likely to be relatively more responses from financially distressed women, than from financially distressed men. Furthermore, understanding the magnitude that income plays in gender gaps is important for determining appropriate policy responses.

On this basis, the second round of analysis introduced controls for respondent income levels through income quartile of household and respondent financial situation through respondents' answers to Question 12 of the survey.¹⁰

For the former, responses from people in either the 1st or 4th income quartile were assessed. For the latter, the analysis draws from the precedent of Question 12 (“Which of these statements best describes the current financial situation of your household?”) used as a measure of income in Reuter (2016), and as an ongoing measure of financial distress in annual and quarterly employment reports by the European Commission.¹¹ Responses from people who reported a more favourable financial situation (answered “saving a lot” or “saving a little”) and responses from people who reported a less favourable financial situation (answered either “running into debt” or “drawing on savings”) were used to assess the impact of financial situation on the gender gap in financial well-being.¹²

Income controls were analysed through calculating the average difference in the balance statistics overtime for the 1st and 4th income quartiles, and for those who reported being in a lesser or a more favourable financial situation. The results of these calculations were then compared against the results from the first round analysis, which tested the full dataset without income controls, to determine the magnitude of change in any gender gap identified in the first round, with the introduction of the income and financial situation controls.

Final results consider findings from the first round analysis alongside those from the second round, to determine the magnitude of any gender gap in financial well-being identified and the sensitivity of any such gap, to income or financial situation of a household.

¹⁰ Seasonally adjusted data were not available for the second round analysis, yet given the analysis focused on aggregate averages over time rather than trend points, it is reasonable to assume that this has no impact on results.

¹¹ DG Employment, Social Affairs and Inclusion, “Employment and Social Developments in Europe”, annual and quarterly reviews. Full text of most recent and historic reports, and underlying data and calculations available at:

<https://ec.europa.eu/social/main.jsp?catId=113&langId=en#navItem-1>

¹² This combination accounts for both the compounding impact of low income levels of women on the gender gap in financial well-being and incorporates an aspect of the lived experience of financial-wellbeing which persists outside of monetary income levels – and may, for example, indirectly account for household composition (a large household may report in the upper income quartile but not have a lot of savings).

4. RESULTS

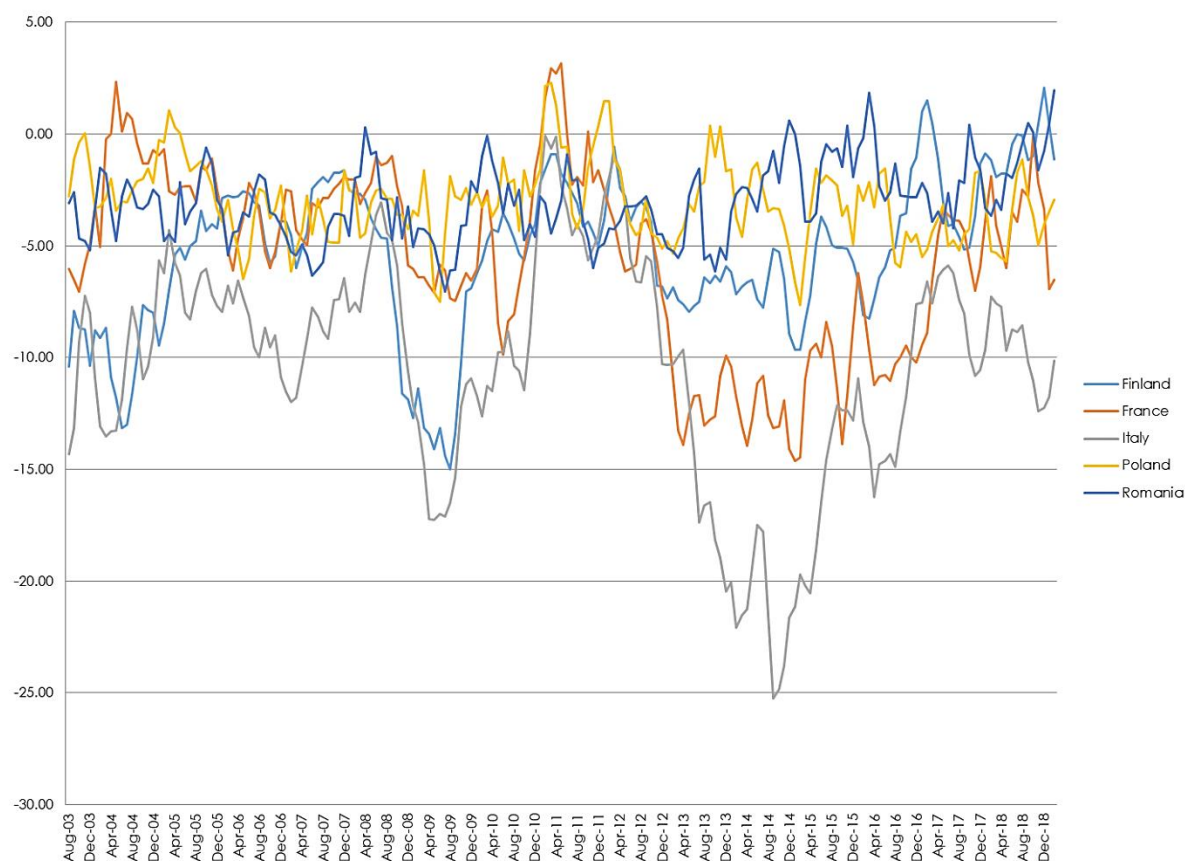
Results from the first round of analysis demonstrated a clear gender gap across each of the four hypotheses. These findings were robust to the inclusion of both income controls under the second round of analysis. These findings demonstrate that the gender gap in financial well-being identified is not solely explained (or solely solvable) through income.

4.1. HYPOTHESIS 1: GENDER GAP IN PRICES

The expectation under Hypothesis 1 is that results will yield a negative difference between the male balance and the female balance, demonstrating that female respondents are more likely to report higher historical price experience and are more likely to expect prices will accelerate in the future than male respondents. Given the open EU market, it is expected that there could be some convergence in price experience over time between countries, on the basis that experience of prices would to some extent indirectly reflect real price levels. However, unless there were clear policy interventions, there is unlikely to be convergence in this gap within a country.

As evident in Graph 4.1 below, under the First Round Analysis of Question 5 on price experience, there is a clear negative difference between the male and female balance statistics for each of the five countries in the sample. The gender gap in price experience was, on average, -5.5 points but with considerable cross-country variation: from -3 points in both Romania and Poland, to -10.4 points in Italy. There is also little evidence of either a decreasing trend in the gap, or of convergence between countries; while the gap appears to narrow across countries in 2011, since the economic recovery took hold price experience has again diverged.

Graph 4.1. Hypothesis 1: Question 5: Price Experience

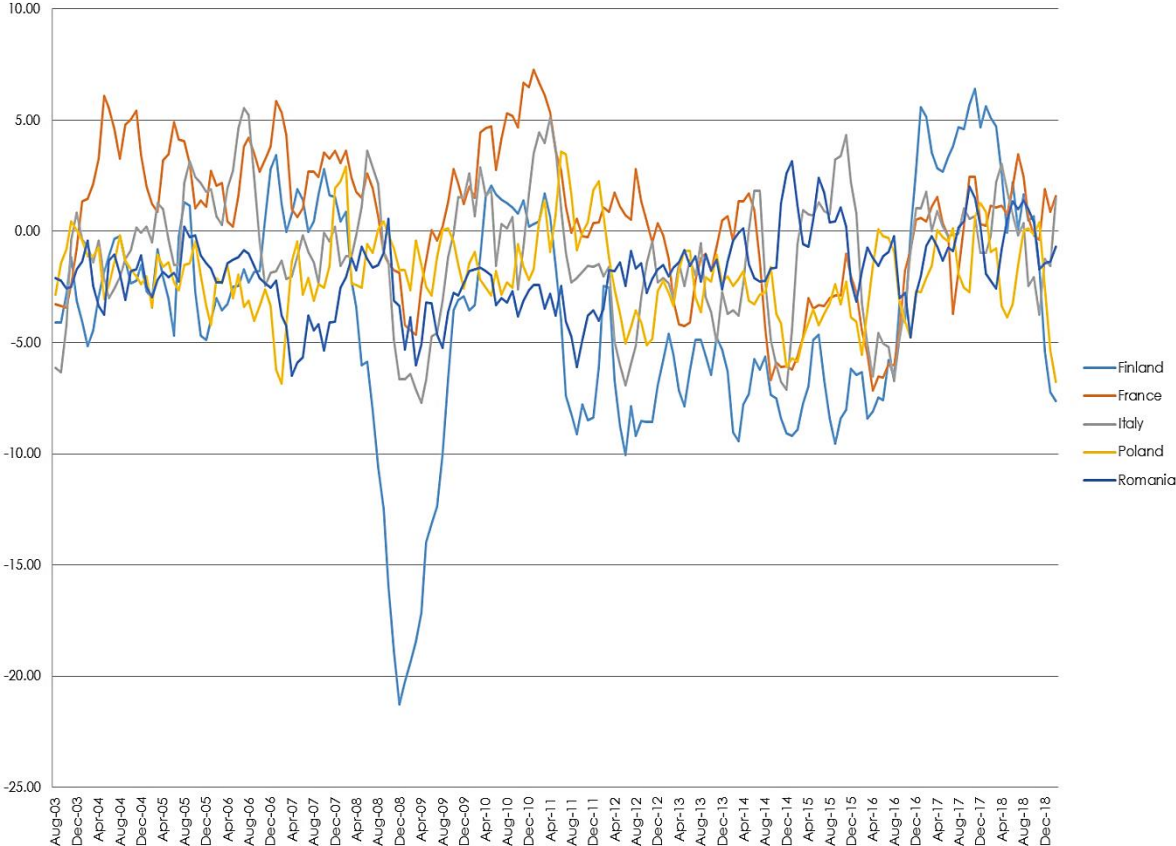


Source: ECFIN analysis of Business and Consumer Survey Data

However, as evident under Graph 4.2 below, when Question 6 on price expectations is tested, while a gap is evident, the gap in past experience of prices by female respondents under Question 5 does not appear to translate into consistently higher expectations of future prices.

The gender gap in future price expectations in the sample is on average -1.60 points. Although the gap in the countries with higher GDP and higher gender equality rankings in the sample is mixed – Finland has the largest gap at -3.78 points while France has both the smallest gap, and a marginally positive gap (indicating that on average men expect future prices to increase faster than women do). Italy, Poland and Romania, who rank lower in terms of both income and gender inequality in the sample, have a small negative gender gap in line with the hypothesis, averaging -0.97 points, -1.93 points and -1.88 points respectively.

Graph 4.2. Hypothesis 1: Question 6: Price Expectations



Source: ECFIN analysis of Business and Consumer Survey Data

Nevertheless, when income controls are applied, either through income quartile or through financial situation, the gender gap in price experience does not disappear and the gender gap on price expectations also persists, albeit with less statistical significance.

As evident in Table 4.1 below, when income is controlled for through income quartile, the average gender gap on past price experience across the sample reduces by a very small amount to -4.85 points and -5.15 points for the richest and poorest population quartiles respectively. However, there is variation across the countries with the gender gap in price experience increasing for the richest population quartiles in both Finland and France, though declining in the three other countries. On top of this, while the gap in Romania and Poland declines a small amount under income quartile controls, there is a marginally larger gap for the poorest population quartile than for the richest, in these member states. However, the gap in Italy increases for the poorest population quartile while it decreases for the richest quartile, indicating some mitigating impact of income.

Under income controls through financial situation, the gender gap on price experience again declines only by a small amount. When the sample is restricted to households with a less favourable financial situation, the gender gap in price experience is -5 points (though this is slightly less than the -5.15 points for the poorest population quartile). When the sample is restricted to respondents reporting a more favourable financial situation, the average gender gap again decreases by a very small amount. However, in Poland the gender gap increases against the national average under these income controls (going from -3 points to -4.5 points).

Table 4.1. Hypothesis 1: Question 5: Price Experience

| | Average | France | Italy | Poland | Romania | Finland |
|--|---------|----------|-----------|----------|----------|----------|
| Aggregate Balance Difference | -5.49 | -5.60*** | -10.46*** | -3.01*** | -3.02*** | -5.38*** |
| Financial Situation | | | | | | |
| Saving a lot or saving a little | -5.14 | -4.55*** | -8.66*** | -4.53*** | -2.78*** | -5.18*** |
| Running into debt or drawing on savings | -5.01 | -5.87*** | -9.86*** | -1.30** | -2.12*** | -5.93*** |
| Income Quartile | | | | | | |
| Richest 25% | -4.85 | -6.73*** | -6.68*** | -2.59*** | -2.34*** | -6.01*** |
| Poorest 25% | -5.15 | -3.72*** | -11.39*** | -2.95*** | -2.87*** | -4.76*** |

Question 5: "How do you think consumer prices have developed over the last 12 months?"

If female respondents report prices as higher than male, the difference in the balance statistics will be negative

Source: ECFIN analysis of Business and Consumer Survey Data / *** significant at the 1% level, ** significant at the 5% level, *significant at the 10% level

As evident in Table 4.2 below, the gender gap in future price expectations also does not disappear under income controls. Under income controls by income quartile, the average gap reduces marginally for the richest quartile and increases marginally for the poorest quartile. This indicates that although income has some impact, it does not explain and cannot correct for the gap in this measure of financial well-being. Furthermore, the gap increases for the richest quartile in Finland highlighting a compounding impact of income on this gap, rather than a diminishing impact.

Under income controls through financial situation, the average gender gap on price experience increases a little for those in a more favourable financial situation, and decreases for those in a less favourable financial situation. Again, findings across the sample countries are somewhat mixed. While those in the less favourable financial situation in both France and Italy demonstrate a small gap but in the direction contrary to the hypothesis (demonstrating that men were more likely to expect accelerating prices than women) these results were not significant. However, in Finland the gap was large, and remained large and statistically significant under controls for financial situation. Across the full sample, financial situation does not correct for the average gender gap measured.

Table 4.2. Hypothesis 1: Question 6: Price Expectations

| | Average | France | Italy | Poland | Romania | Finland |
|--|---------|---------|----------|----------|----------|----------|
| Aggregate Balance Difference | -1.60 | 0.56*** | -0.97*** | -1.93*** | -1.88*** | -3.78*** |
| Financial Situation | | | | | | |
| Saving a lot or saving a little | -1.87 | 0.47 | 0.47 | -3.59*** | -2.78*** | -3.83*** |
| Running into debt or drawing on savings | -0.68 | 1.23*** | -0.45 | 0.52 | -0.63** | -4.00*** |
| Income Quartile | | | | | | |
| Richest 25% | -1.38 | -0.08 | -0.27 | -1.13*** | -1.00*** | -4.34*** |
| Poorest 25% | -1.70 | -0.14 | -1.10*** | -1.87*** | -2.06*** | -3.25*** |

Question 6: "By comparison with the past 12 months, how do you expect consumer prices will develop over the next 12 months?"

If female respondents expect prices to be higher than male, the difference in the balance statistics will be negative

Source: ECFIN analysis of Business and Consumer Survey Data / *** significant at the 1% level, ** significant at the 5% level, *significant at the 10% level

Overall, the results for Hypothesis 1, indicate that an increase or decrease in income, or a more favourable or less favourable financial situation does not change the fact that female respondents consistently report past prices to have risen more than men, and while the gap is smaller for future price expectations, it persists and is again robust to income controls.

It should be noted that these results could be picking up an inherently different basket of goods purchased by men and women, or, price differences due to fewer substitutable options available to women in a narrow competitive market. However, given that Question 5 relates to inflation, rather than price levels, analysis would be required to determine why inflation would rise faster for goods more frequently purchased by women than men. This could be explained through persistent increases in the prices of inputs for goods more purchased by women, which did not manifest to the same extent in goods purchased by men, if there is considerable distinction in the basket of goods. Although this is not implausible, it warrants further exploration. It could highlight inherent market and commercial biases resulting in higher input prices, which in turn result in higher inflation and then result in higher prices for goods more frequently purchased by women rather than men over the long-term. Or, in line with the evidence outlined in Section Two, this question could be indirectly picking up final higher prices at the point of sale. However, across the board, given the persistence of the gender gap in price experience to income and financial situation, there may also be structural issues such as social or cultural factors, or trust in institutions as well as market or commercial reasons at play.

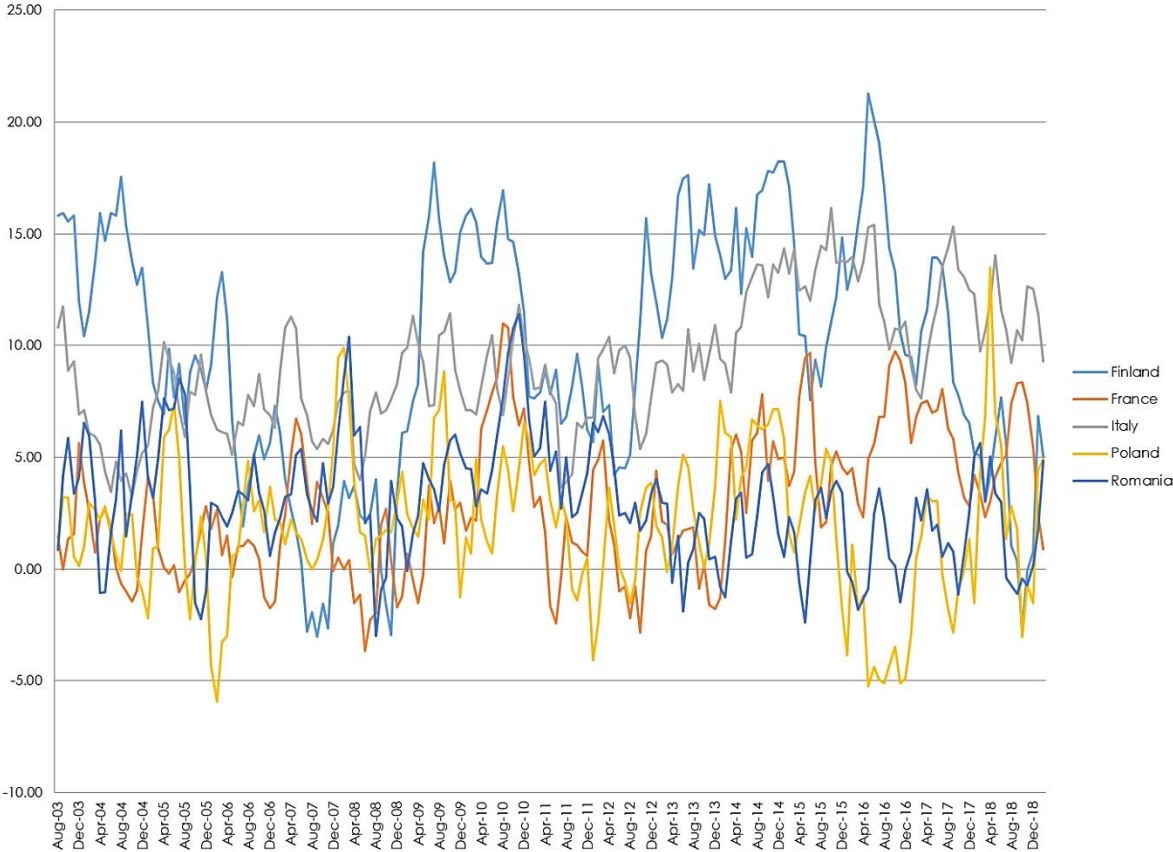
4.2. HYPOTHESIS 2: GENDER GAP IN RISK AVERSION

The expectation under Hypothesis 2 is that results will yield a positive difference, with female respondents less likely to report that now is the time to make major purchases in comparison to male respondents. It is also expected that this gap is unlikely to converge within a country overtime, given the evidence pointing to some element of the gap being psycho-social and the need to have either targeted supportive financial policy interventions to correct for it, or amended financial products at the

provider level, which would take time to have an aggregate effect. However, it is expected that there may be points of convergence between countries when they experience similar macro-economic shocks which bring about a change in behaviour, as risk aversion to spending is likely to increase at the aggregate in times of macro-economic contraction and distress.

As evident in Graph 4.3 below, results are in line with the hypothesis, and female respondents appear less likely to report that now is the time to make major purchases across all five countries in the sample. On average, there is a gender gap of +5.37 points across the sample, though with considerable variation in the gap across the five countries; Finland and Italy both report a gap of over +9 points, while the average gap in Poland is just less than +2 points. The trends in the average gaps between countries overtime are somewhat in line with the expectation that countries would experience similar changes in risk aversion at similar times of macro-economic stress, with some apparent convergence in 2010/2011 – although the lack of an economic recession in Poland does not appear to have any considerable impact on risk aversion to spending in that country when compared to others.

Graph 4.3. Hypothesis 2: Question 8: Risk Aversion



Source: ECFIN analysis of Business and Consumer Survey Data

While this gap reduces under income controls, it does not disappear. This again indicates, (in line with the literature) that the gender gap in risk aversion is not due solely to income and that there are more foundational aspects at play.

Under income controls through income quartile, the gender gap in price experience reduces across each country, averaging +2.65 points for the richest population quartile and +3.62 points for the poorest population quartile. Though again there is considerable variation between the sample

countries, with a gap of over +7 points for the poorest population quartile in Finland and +1.36 points in Romania.

When the sample is restricted to households who reported a more favourable financial situation, the average gender gap on risk aversion is +3.52 points. When the sample was restricted to households with a less favourable financial situation, the average gender gap in risk aversion decreases to +2.4 points. Again, this evidence indicates that although income plays a role in the gender gap in risk aversion, there are other factors also at play.

On the whole, results for Hypothesis 2 indicate that although income levels plays a role in the gender gap in risk aversion, they are not the sole explanatory factor, and as identified in the literature, behavioural responses persist.

Table 4.3. Hypothesis 2: Question 8: Risk Aversion

| | Average | France | Italy | Poland | Romania | Finland |
|--|---------|---------|---------|---------|---------|---------|
| Aggregate Balance Difference | 5.37 | 2.85*** | 9.20*** | 1.97*** | 2.98*** | 9.86*** |
| Financial Situation | | | | | | |
| Saving a lot or saving a little | 3.52 | 2.90*** | 5.68*** | 1.25*** | 0.48 | 7.29*** |
| Running into debt or drawing on savings | 2.40 | 1.30*** | 3.77*** | 0.51* | 1.01*** | 5.37*** |
| Income Quartile | | | | | | |
| Richest 25% | 2.65 | 1.90*** | 2.27*** | 0.98*** | 2.14*** | 5.92*** |
| Poorest 25% | 3.62 | 2.45*** | 5.20*** | 1.84*** | 1.36*** | 7.19*** |

Question 8: "In view of the general economic situation, do you think that now it is the right moment for people to make major purchases such as furniture, electrical, electronic devices etc.?"

If female respondents report being less likely to recommend purchasing major items than male, the difference in the balance statistics will be positive

Source: ECFIN analysis of Business and Consumer Survey Data / *** significant at the 1% level, ** significant at the 5% level, *significant at the 10% level

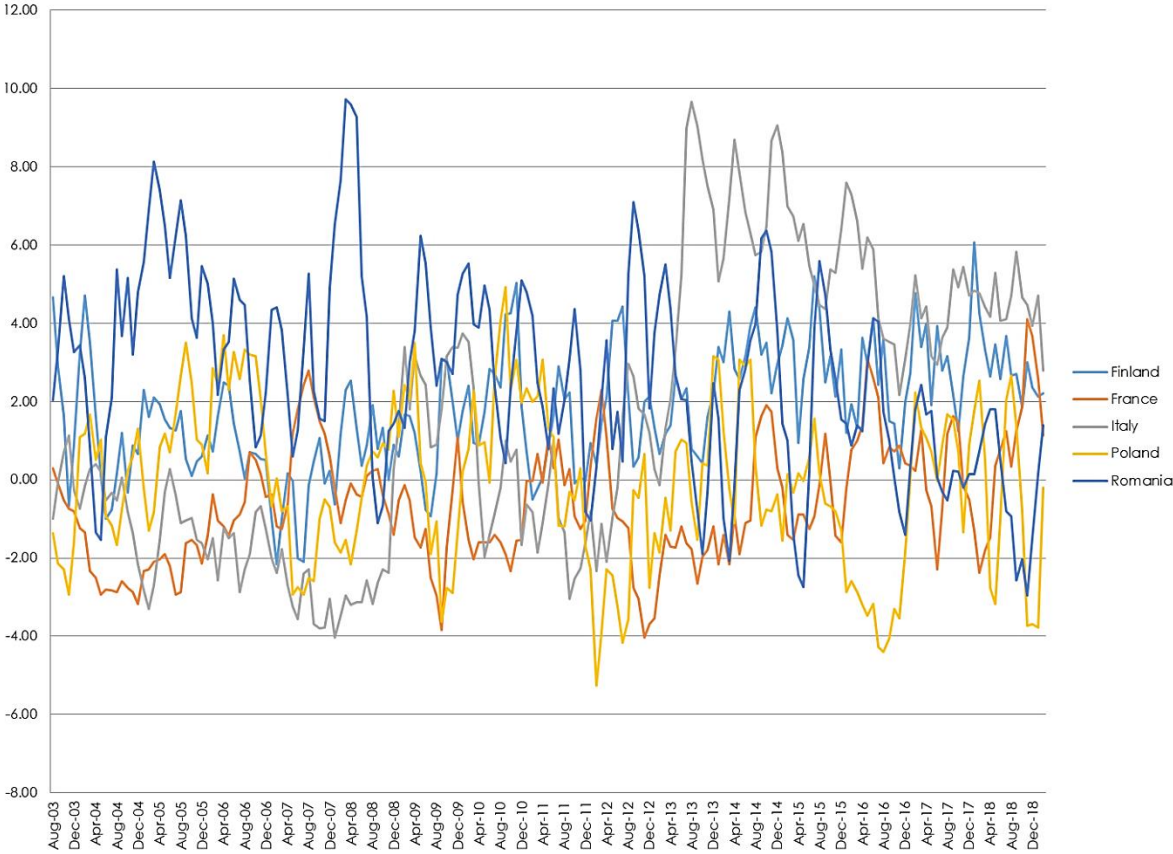
4.3. HYPOTHESIS 3: GENDER GAP IN SPENDING PREFERENCES

The expectation under Hypothesis 3 is that results will yield a positive difference between the male balance and the female balance, demonstrating that female respondents are more likely to expect to spend less on major purchases than male, over the next 12 months than the past. This could be considered an indication of future confidence in ability to spend, thereby potentially picking up feeling secure in future financial capabilities. It is also expected that, similar to Hypothesis 2, there may be convergence between countries over time with similar macro-economic experiences.

As outlined in Graph 4.4 below, there is evidence that female respondents are more conservative in future spending intentions than male. Although there are some large spikes in the sample at different points, for example in Autumn 2013 the gap in Italy was +9.67 points and in May 2008 in Romania was +9.73 points, across the time period as a whole, the average gap across the sample is +1.06 points. Trends do not appear to be consistent either within or between countries. While, Poland and France

(both mid-ranking on income inequality in the EU) have the smallest average gaps and both report non-positive gaps (-0.12 points and -0.62 points respectively), results across both rounds of analysis are less statistically significant for them than other countries. Furthermore, the only statistically significant result for Poland is when the hypothesis holds for the poorest population quartile. The variation in the trends is highlighted in the Italian data where the gap starts out negative but then moves to positive in more recent years, trending more in line with expectations.

Graph 4.4. Hypothesis 3: Question 9: Spending Preferences



Source: ECFIN analysis of Business and Consumer Survey Data

This gender gap diminishes but does not entirely disappear when income controls are introduced, providing some support (in line with the literature) that the gender gap in future spending preferences is not due solely to income and that women are less likely to expect to spend than men.

Under income controls through income quartile, the average gender gap on spending preferences increases marginally for the richer population quartile to +1.61 points. The magnitude of this increase varies considerably across countries, with an increase from +1.81 without income controls to +4.20 points for the richest population quartile in Finland, and from +2.63 points to +3.09 points in Romania. This indicates that higher levels of income exacerbate the gap; women in the higher income bracket are even less likely to expect to spend on major purchases over the next 12 months than women in lower income brackets. When the sample is restricted to only respondents from the lowest income quartile, the average gap reduces but does not disappear entirely. Again, the impact varies across countries; the gender gap in Finland, France and Romania reduces, while in France and Italy it marginally increases.

When the sample is restricted to households who reported a more favourable financial situation, the average gender gap on spending preferences reduces to +0.67 points. When the sample is restricted to

households with a less favourable financial situation the average gender gap on spending expectations reduces to +0.7 points.

Overall, again although there are some reductions in magnitude, the gender gap in spending preferences is robust to controls for income, indicating that income levels do not explain the differences in future spending expectations between men and women, and that there are other, potentially, structural aspects at play.

Table 4.4. Hypothesis 3: Question 9: Spending Preferences

| | Average | France | Italy | Poland | Romania | Finland |
|--|---------|----------|----------|--------|---------|---------|
| Aggregate Balance Difference | 1.06 | -0.61*** | 1.60*** | -0.12 | 2.63*** | 1.81*** |
| Financial Situation | | | | | | |
| Saving a lot or saving a little | 0.67 | -1.03*** | 2.68*** | 0.47 | -0.22 | 1.36*** |
| Running into debt or drawing on savings | 0.70 | -0.02 | 0.42* | -0.18 | 1.47*** | 1.78*** |
| Income Quartile | | | | | | |
| Richest 25% | 1.61 | 1.06*** | -0.60*** | 0.28 | 3.09*** | 4.20*** |
| Poorest 25% | 0.58 | -0.27 | 1.70*** | 0.59** | 1.19*** | -0.33 |

Question 9: "Compared to the past 12 months do you expect to spend more or less money on major purchases (furniture, electrical / electronic devices etc.) over the next 12 months?"

If female respondents report being less likely to expect spending on major items than male, the difference in the balance statistics will be positive

Source: ECFIN analysis of Business and Consumer Survey Data / *** significant at the 1% level, ** significant at the 5% level, *significant at the 10% level

4.4. HYPOTHESIS 4: GENDER GAP IN SAVINGS PREFERENCES

The expectation under Hypothesis 4 is that results will yield a positive difference between the male and female balance, demonstrating that female respondents report less likely that they will save than male. In line with Hypothesis 2 and 3, it is also expected that there may be convergence between countries over time with similar macro-economic experiences.

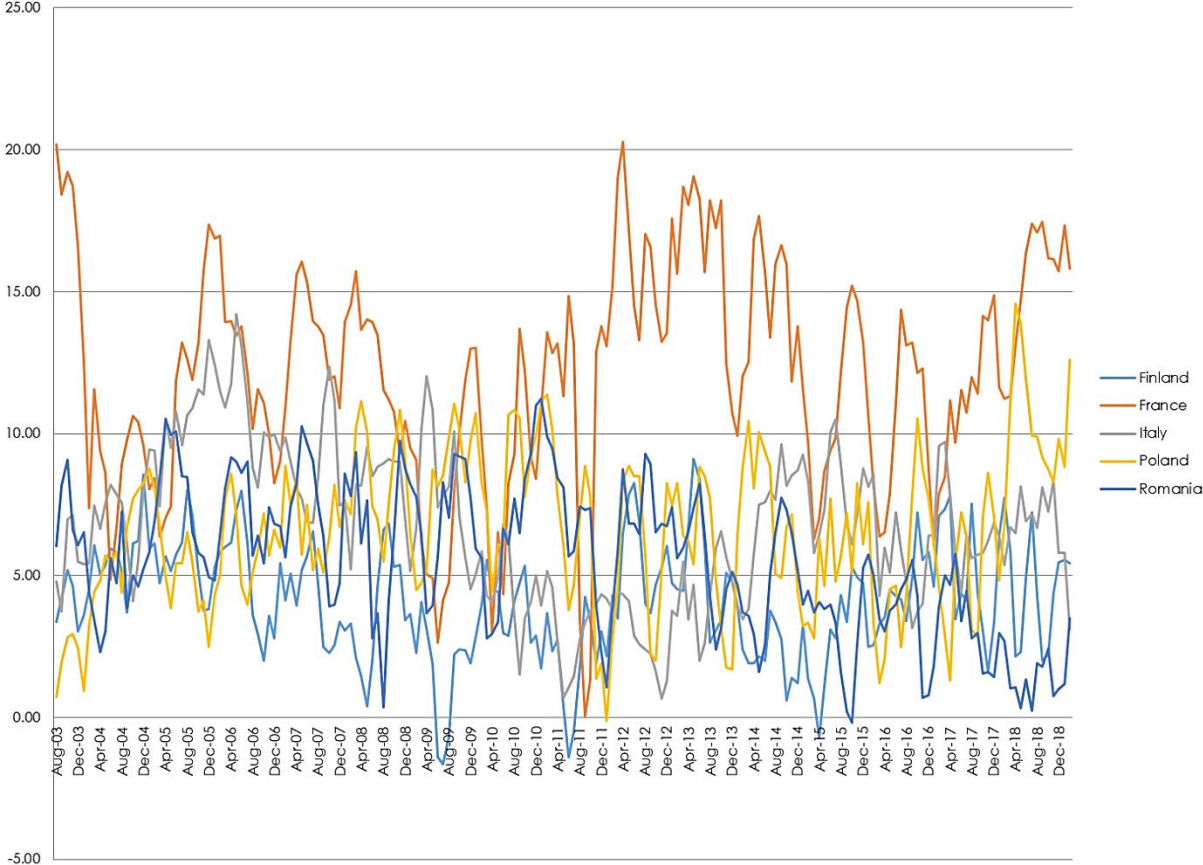
As outlined in Graph 4.5 below, while the magnitude of the gender gap in savings preferences varies between countries, across the full sample, women are less likely to expect to save than men with very few exceptions. The average gap for the full sample is +7 points. Across the five countries in the sample, savings expectations were low for both male and female respondents in the midst and the wake of the economic recession (late 2008-2010). This is in line with the expectation that savings expectations would converge in countries with similar macro-economic climates. However, this period appears to be the only point of cross-country and cross-gender convergence, with considerable variation in the magnitude of the gap evident in the sample countries over the full time period.

There is, however, some evidence of within-country convergence. The trend appears to be decreasing and narrowing in deviation around the mean in Romania and the spikes in the gap in Italy appear to

have diminished in more recent years. Though the spikes in France are persistent and the gap in Finland also appears to continue to vary considerably.

On the whole, the evidence for the gender gap in savings preferences appears to be strong and results are significant in all cases across the five countries.

Graph 4.5. Hypothesis 4: Question 11: Savings Preferences



Source: ECFIN analysis of Business and Consumer Survey Data

Again, although this measurement of the gender gap in financial well-being is sensitive to income controls across all five sample countries, the gap persists and does not disappear entirely.

Under income controls through income quartile, the gender gap in savings expectations declines, but is still evident. The poorest population quartile still have a gap of +2.65 points on average; +4.29 points in Poland, and over +3 points in both Italy and Romania. While the gap for richest population quartile diminishes in all contexts, again the magnitude varies, with a gap of +3.99 points persisting in Romania and -1.63 points in Finland. This non-negative result in Finland indicates the complexity of the role income plays amidst other factors for the gender gap in financial well-being.

Under income controls through financial situation, the gender gap in savings expectations also reduces. When the sample is restricted to respondents who report a worse financial situation, the gender gap is nearly 10 times smaller, reducing from +7 points to +0.83 points. While there is variation within this average trend, and results are significant across all countries, this is a considerable reduction. When the sample is restricted to respondents with a more favourable financial situation, the gender gap reduces but is still clear in all contexts. The average across the sample is +2.07 points and this ranges from +1.17 points in Romania to +2.84 points in Finland. This highlights that a better off financial situation does not mitigate against the gender gap in this context.

Table 4.5. Hypothesis 4: Question 11: Savings Preferences

| | Average | France | Italy | Poland | Romania | Finland |
|--|---------|----------|---------|---------|---------|----------|
| Aggregate Balance Difference | 7.01 | 12.21*** | 6.75*** | 6.55*** | 5.47*** | 4.07*** |
| Financial Situation | | | | | | |
| Saving a lot or saving a little | 2.07 | 2.11*** | 1.96*** | 2.25*** | 1.17*** | 2.84*** |
| Running into debt or drawing on savings | 0.83 | 3.37*** | 1.79*** | 1.51*** | 0.92*** | -3.35*** |
| Income Quartile | | | | | | |
| Richest 25% | 1.97 | 5.57*** | 0.58** | 1.51*** | 3.99*** | -1.63*** |
| Poorest 25% | 2.65 | 1.29*** | 3.44*** | 4.29*** | 3.52*** | 0.67*** |

Question 11: "Over the next 12 months how likely is it that you save any money?"

If female respondents report being less likely to save money in the future than male, the difference in the balance statistics will be positive

Source: ECFIN analysis of Business and Consumer Survey Data / *** significant at the 1% level, ** significant at the 5% level, *significant at the 10% level

4.5. LINKS ACROSS THE MEASURES OF FINANCIAL WELL-BEING

Given that financial well-being encompasses a range of aspects which comprise to shape individual or household, financial experience, the interplay and links between the four hypotheses should be considered. Standard economic theory would demand that respondents be rational – if respondents report that they expect less spending under Hypothesis 3, that they would then report more savings (income shift from consumption to saving), or less savings (expected reduction in income overall) under Hypothesis 4. However, it is possible that respondents might report both spending more under Hypothesis 3 and lots of savings under Hypothesis 4. This combination could be due to an expected increase in income, or it could potentially demonstrate an inherent inconsistency indicating financial literacy or structural issues at play.

The evidence under Hypothesis 3, that female respondents are more likely to report less spending intentions than male respondents, is somewhat mixed. The evidence under Hypothesis 4, that female respondents are less likely to report savings expectations than male, is strong until income controls are introduced. This combination is not inherently irrational; that female respondents have both some intentions about future large spending and expect to save less makes sense. It could be that future savings expectations are constrained somewhat due to the increased future spending. The evidence from the income controls included support this. However, given that Hypothesis 2 is about whether others should make large purchases while Hypothesis 3 is about expectations regarding oneself in light of the recent past, further exploration teasing out the differences in responses and expectations between behaviour relevant for oneself versus recommendations for others, is warranted. The large income effects could go somewhat towards explaining this, if female respondents are more likely than male to believe that others have larger incomes than themselves. This belief is plausible on the understanding that there are fewer female headed households than males, and that they have lower income levels – so as a female head of household it is more likely that another household will have a higher income level than your own. However, further understanding the correlations and causations between the hypotheses is well warranted, particularly given the fact that financial well-being is a holistic concept comprised of a range of different measures and experiences.

Overview results outlined in Table 4.6 below.

Table 4.6. Overview Results

| | | Question 5 | Question 6 | Question 8 | Question 9 | Question 11 |
|----------------------------|--|------------|------------|------------|------------|-------------|
| | Aggregate Balance Difference | -5.49 | -1.60 | 5.37 | 1.06 | 7.01 |
| Financial Situation | Saving a lot or saving a little | -5.14 | -1.87 | 3.52 | 0.67 | 2.07 |
| | Running into debt or drawing on savings | -5.01 | -0.68 | 2.40 | 0.70 | 0.83 |
| Income Quartile | Richest 25% | -4.85 | -1.38 | 2.65 | 1.61 | 1.97 |
| | Poorest 25% | -5.15 | -1.70 | 3.62 | 0.58 | 2.65 |

Source: ECFIN analysis of Business and Consumer Survey Data

5. CONCLUSION

This paper analysed survey data on financial experience and macro-economic factors, to determine the building blocks of the gender gap in financial well-being. Four hypotheses on the gender gap in financial well-being were developed through combining an extensive evidence base on differences in gender responses to financial contexts, with analysis of a detailed and robust long-term survey dataset of the European Commission. Section 2 outlined the evidence base which provided the depth of motivation and insight on the breadth of factors that underpin a gender difference in financial well-being, which have not been considered in the round before and detailed the hypotheses tested. Section 3 outlined the Business and Consumer Survey dataset which provided the robust, long-term comparison necessary to unpick the component elements of the gender gap and the analytical approach undertaken.

Analysis compared the difference in the balance of positive to negative responses, between male and female respondents across five questions testing household and individual experience of both personal financial and macro-economic factors. Results outlined in Section 4 demonstrate a gender gap in price experience, risk aversion, savings expectations and spending preferences. Even when income is controlled for, a significant and sizeable gender gap remains in price experience across the five sample countries. The gender gap in risk aversion is also persistent to income in all but one instance, and although it reduces with income controls, the gender gap in savings preferences is also significant in all five countries. Results indicate that the gender gap in expectations of future price acceleration and spending preferences are small to start, and reduce with income controls but have less consistent statistical significance across the five countries.

Further analysis could shed more light on the make-up of these gaps. Extending the analysis to the remaining EU member states under the BCS, would yield further cross-country and cross-temporal insights which may go towards understanding past price experience versus future price expectations differentials, or the possible inconsistency in female responses for not spending themselves but recommending it for others. Analysis on the reasons behind the gap in past price experience, including identifying potential differences in consumption baskets would also provide more insights. Another

possible extension of this research could be to assess the changes in the gap within and between countries between recession and expansionary periods – particularly in light of the evidence that income inequality contracts in recessionary periods (Piketty 2014). Additional controls from the BCS such as education, working regime and age could also be included to further test the hypotheses.

On the whole, the results of this paper indicate that men and women have different financial experiences, which fundamentally underpin their financial well-being, and that these differences for the most part, are not due to differences in income. While wage and income gender gaps remain and warrant continued attention and policy responses, the results of this paper demonstrate that there are structural factors underpinning a gender gap in financial well-being which persist even when controlling for income; solving the income gender gap alone will not correct entirely for the broader gender gap in financial well-being. Wider factors which appear to be market-based, stem from social or cultural issues or institutional trust, also play a role. These results both highlight and shed light on the complexity of gender gap composition, and the consideration required for design of effective policy responses targeted at correcting the structural components of that gender gap, as well as correcting for the outcomes realised. Any progress towards reducing a gender gap in financial well-being and towards releasing the macro-economic gains available must also include regulatory and legislative interventions which address these foundational inputs to the gender gap, alongside continued consideration of policy responses to reducing wage and income inequalities.

REFERENCES

- Ayres, I. and Siegelman, P. (1995). Race and Gender Discrimination in Bargaining for a New Car. *American Economic Review* 85: June 1995: 304-321.
- Bessendorf, A., de Blaiso, B., and Menin, J. (2015). From Cradle to Cane: The Cost of Being a Female Consumer, A Study of Gender Pricing in New York City. New York City Department of Consumer Affairs. <https://www1.nyc.gov/assets/dca/downloads/pdf/partners/Study-of-Gender-Pricing-in-NYC.pdf>
- Borghans, L., Golsteyn, B., Heckman, J., Meijers, H. (2009). Gender Differences in Risk Aversion and Ambiguity Aversion. National Bureau of Economic Research Working Paper 14713.
- Charness, G. and Gneezy, U. (2012). Strong Evidence for Gender Differences in Risk Taking. *Journal of Economic Behavior & Organisation* 83: 2012: 50-58.
- Consumer Financial Protection Bureau. (2015). Financial well-being: The goal of financial education. January 2015. https://files.consumerfinance.gov/f/201501_cfpb_report_financial-well-being.pdf
- Cottle, T.J., (1976). *Perceiving Time*. New York, John Wiley.
- Duca, I., Kenny, G. and Reuter, A. (2019). Inflation Expectations, Consumption and the Lower Bound: Micro Evidence from a Large Euro Area Survey. Discussion Paper 092. February 2019. Brussels.
- Elborgh-Woytek, K., Newiak, M., Kochhar, K., Fabrizio, S., Kpodar, K., Wingender, P., Clements, B., Schwartz, G., (2013). Women, Work and the Economy: Macroeconomic Gains from Gender Equity. International Monetary Fund Staff Discussion Note.
- Equal Measures 2030 (2019). Harnessing the Power of Data for Gender Equality: Introducing the 2019 EM2030 SDG Gender Index. https://data.em2030.org/wp-content/uploads/2019/05/EM2030_2019_Global_Report_ENG.pdf
- European Commission (2017). Consumer Financial Services Action Plan: Better Products, More Choice. Brussels, 23.3.2017; COM (2017) 139 final.
- European Institute for Gender Equality (2016). Economic Benefits of Gender Equality in the European Union. European Institute for Gender Equality (EIGE).
- Fischer, P. (2010). Gender Differences in Personal Saving Behaviors. *Journal of Financial Counselling and Planning* 21: 1.
- Fisher, P., Hayhoe, C., Lown, J., (2015). Gender differences in savings behaviors among low- to moderate-income households. *Financial Services Review* 24: 1-13.
- Fitzpatrick, A., (2017). Shopping While Female: Who Pays Higher Prices and Why? *American Economic Review: Papers & Proceedings* 2017, 107(5): 146-149.

Fitzsimmons, V. and Wakita, S. (1993). Expectation of Future Financial Condition: Are Men and Women Different? *Journal of Financial Counselling and Planning* 4: 165-178.

Flynn, J., Slovic, P., and Mertz, C. K. (1994). Gender, race, and perception of environmental health risks. *Risk Analysis*, 14(6), 1101-1108.

Gustafson, P. (1998). Gender differences in risk perception: theoretical and methodological perspectives. *Risk Analysis*. 18(6):805-11.

Hira, T., and Mugenda, O. (2000). Gender Differences in Financial Perceptions, Behaviors and Satisfaction. *FPA Journal* 2000.

International Labour Organization (2018). *World Employment Social Outlook, Trends for Women 2018*.

Jacobsen, B., Lee, J., Marquering, W., and Zhang, C. Y. (2014). Gender Differences in Optimism and Asset Allocation. *Journal of Economic Behavior & Organization*, 107, 630-651.

Machelett, M. (2018). *Gender price gaps and competition: Evidence from a correspondence study*. Brown University 2018.

Nanadan, P., and Fernandez, S. (2017). A Study on the Gender Differences in the Spending Attitude and Behavior of IT Professionals in Urban Bangalore. *International Journal of Business and Management Invention* 6: 55-59.

Ñopo, H., Daza, N. and Ramos, J. (2011). Gender Earnings Gaps in the World. *World Development Report 2012 Gender Equality and Development Background Paper*.

OECD Employment Outlook 2017 https://www.oecd-ilibrary.org/employment/oecd-employment-outlook-2017_empl_outlook-2017-en

Olsen, R. and Cox, C. (2001). The Influence of Gender on the Perception and Response to Investment Risk: The Case of Professional Investors, *Journal of Psychology and Financial Markets*, 2:1, 29-36.

Piketty, T. (2014). *Capital in the Twenty-First Century*. Cambridge Massachusetts: The Belknap Press of Harvard University Press, 2014.

Powel, M., and Ansic, D. (1997). Gender differences in risk behaviour in financial decision-making: An experimental analysis. *Journal of Economic Psychology* 18: 1997: 605-628.

Posadas, J., Paci, P., Sajaia, Z. and Lokshin, M. (2017). *Measuring Gender Equality: Streamlined Analysis with ADePT Software*. Washington, DC: The World Bank.

Reuter, A. (2016). *European Business Cycle Indicators 2nd Quarter 2016 – Special topics: What survey data tell us about inequality*. European Commission, Technical Paper 009, July 2016.

Thévenon, O., Ali, N., Adema, W., Salvi del Pero, A. (2012). Effects of Reducing Gender Gaps in Education and Labour Force Participation on Economic Growth in the OECD. *OECD Social, Employment and Migration Working Papers No.138*.

US Government Accountability Office (2018). Consumer Protection: Gender-Related Differences for Goods and Services. Report to Congressional Requesters. <https://www.gao.gov/assets/700/693841.pdf>

Wilhelm, M.S. and Varcoe, K. (1991). Assessment of Financial Well-being: Impact of Objective Economic Indicators and Money Attitudes on Financial Satisfaction and Financial Progress. Proceedings of the Association for Financial Counselling and Planning Education, ed. Danes, S.M., 184-210.

Wodon, Q., and B. de la Brière. (2018). Unrealized Potential: The High Cost of Gender Inequality in Earnings. The Cost of Gender Inequality Notes Series. Washington, DC: The World Bank.

World Economic Forum. (2018). The Global Gender Gap Report. 2018.

<https://www.weforum.org/reports/the-global-gender-gap-report-2018>

ANNEX I FULL RESULTS

| | | Question 5 | | | | | | |
|---------------------|--|--------------------|--------|----------|-----------|----------|----------|----------|
| | | Average | France | Italy | Poland | Romania | Finland | |
| Financial Situation | Aggregate Balance Difference | average | -5.49 | -5.60*** | -10.46*** | -3.01*** | -3.02*** | -5.38*** |
| | | max | 3.17 | 3.17 | -0.07 | 2.30 | 1.97 | 2.07 |
| | | min | -25.23 | -14.60 | -25.23 | -7.63 | -7.03 | -15.00 |
| | | standard deviation | 4.41 | 4.09 | 5.07 | 1.77 | 1.71 | 3.44 |
| | Saving a lot or saving a little | average | -5.14 | -4.55*** | -8.66*** | -4.53*** | -2.78*** | -5.18*** |
| | | max | 10.22 | 6.68 | 2.98 | 8.46 | 10.22 | 2.05 |
| | | min | -26.17 | -19.19 | -26.17 | -15.01 | -14.12 | -14.26 |
| | | standard deviation | 5.20 | 5.34 | 6.10 | 4.52 | 4.22 | 3.54 |
| | Running into debt or drawing on savings | average | -5.01 | -5.87*** | -9.86*** | -1.30** | -2.12*** | -5.93*** |
| | | max | 18.42 | 3.35 | 1.83 | 18.42 | 8.53 | 6.90 |
| | | min | -34.68 | -19.60 | -34.68 | -15.37 | -9.68 | -26.05 |
| | | standard deviation | 6.21 | 4.70 | 6.13 | 6.06 | 3.54 | 6.01 |
| Income Quartile | Richest 25% | average | -4.85 | -6.73*** | -6.68*** | -2.59*** | -2.34*** | -6.01*** |
| | | max | 10.29 | 10.29 | 5.19 | 7.81 | 9.47 | 5.70 |
| | | min | -28.96 | -21.73 | -28.96 | -14.32 | -10.54 | -16.76 |
| | | standard deviation | 5.13 | 5.42 | 5.42 | 4.64 | 3.17 | 4.66 |
| | Poorest 25% | average | -5.15 | -3.72*** | -11.39*** | -2.95*** | -2.87*** | -4.76*** |
| | | max | 11.95 | 11.95 | 1.70 | 7.02 | 8.16 | 3.32 |
| | | min | -24.80 | -17.17 | -24.80 | -13.66 | -12.35 | -16.06 |
| | | standard deviation | 5.61 | 5.09 | 5.57 | 3.70 | 3.83 | 4.54 |

Source: ECFIN analysis of Business and Consumer Survey Data / *** significant at the 1% level, ** significant at the 5% level, *significant at the 10% level

| | | Question 6 | | | | | | |
|--|--|--------------------|---------|----------|----------|----------|----------|----------|
| | | Average | France | Italy | Poland | Romania | Finland | |
| Aggregate Balance Difference | average | -1.60 | 0.56*** | -0.97*** | -1.93*** | -1.88*** | -3.78*** | |
| | max | 7.27 | 7.27 | 5.57 | 3.60 | 3.17 | 6.40 | |
| | min | -21.27 | -7.17 | -7.70 | -6.83 | -6.50 | -21.27 | |
| | standard deviation | 3.52 | 3.18 | 2.85 | 1.84 | 1.72 | 5.23 | |
| Financial Situation | Saving a lot or saving a little | average | -1.87 | 0.47 | 0.47 | -3.59*** | -2.78*** | -3.83*** |
| | | max | 12.08 | 10.42 | 12.08 | 6.11 | 8.81 | 7.79 |
| | | min | -22.35 | -12.21 | -10.43 | -12.13 | -17.70 | -22.35 |
| | | standard deviation | 4.96 | 4.69 | 4.42 | 3.73 | 4.61 | 5.27 |
| Running into debt or drawing on savings | average | -0.68 | 1.23*** | -0.45 | 0.52 | -0.63** | -4.00*** | |
| | max | 17.00 | 11.77 | 10.27 | 17.00 | 8.03 | 16.64 | |
| | min | -21.90 | -11.22 | -15.03 | -14.48 | -10.88 | -21.90 | |
| | standard deviation | 5.63 | 4.55 | 4.61 | 6.01 | 3.40 | 7.22 | |
| Income Quartile | Richest 25% | average | -1.38 | -0.08 | -0.27 | -1.13*** | -1.00*** | -4.34*** |
| | | max | 12.50 | 11.49 | 9.82 | 12.50 | 6.42 | 6.24 |
| | | min | -18.48 | -12.27 | -11.94 | -14.68 | -11.50 | -18.48 |
| | | standard deviation | 4.42 | 4.40 | 3.84 | 4.35 | 3.14 | 4.79 |
| Poorest 25% | average | -1.70 | -0.14 | -1.10*** | -1.87*** | -2.06*** | -3.25*** | |
| | max | 16.84 | 12.65 | 10.59 | 6.47 | 11.23 | 16.84 | |
| | min | -30.07 | -8.88 | -14.12 | -9.96 | -11.96 | -30.07 | |
| | standard deviation | 5.20 | 4.22 | 5.09 | 3.39 | 3.58 | 7.85 | |

Source: ECFIN analysis of Business and Consumer Survey Data / *** significant at the 1% level, ** significant at the 5% level, *significant at the 10% level

| | | Question 8 | | | | | | |
|---------------------|---|--------------------|--------|---------|---------|---------|---------|---------|
| | | Average | France | Italy | Poland | Romania | Finland | |
| Financial Situation | Aggregate Balance Difference | average | 5.37 | 2.85*** | 9.20*** | 1.97*** | 2.98*** | 9.86*** |
| | | max | 21.27 | 11.00 | 16.17 | 13.50 | 11.40 | 21.27 |
| | | min | -5.93 | -3.67 | 3.23 | -5.93 | -3.00 | -3.03 |
| | | standard deviation | 4.98 | 3.11 | 2.86 | 3.19 | 2.68 | 5.49 |
| | Saving a lot or saving a little | average | 3.52 | 2.90*** | 5.68*** | 1.25*** | 0.48 | 7.29*** |
| | | max | 13.95 | 12.43 | 13.25 | 10.42 | 13.21 | 13.95 |
| | | min | -13.73 | -4.18 | -2.20 | -8.80 | -13.73 | 0.32 |
| | | standard deviation | 4.43 | 2.66 | 3.11 | 3.95 | 4.60 | 3.25 |
| | Running into debt or drawing on savings | average | 2.40 | 1.30*** | 3.77*** | 0.51* | 1.01*** | 5.37*** |
| | | max | 21.35 | 7.84 | 8.55 | 12.71 | 5.99 | 21.35 |
| | | min | -11.59 | -4.46 | -3.38 | -11.59 | -3.20 | -9.69 |
| | | standard deviation | 4.35 | 2.44 | 2.10 | 4.11 | 1.95 | 6.75 |
| Income Quartile | Richest 25% | average | 2.65 | 1.90*** | 2.27*** | 0.98*** | 2.14*** | 5.92*** |
| | | max | 18.21 | 9.78 | 6.69 | 14.14 | 11.33 | 18.21 |
| | | min | -10.14 | -5.18 | -1.90 | -10.14 | -3.83 | -6.09 |
| | | standard deviation | 3.66 | 2.52 | 1.64 | 4.41 | 2.37 | 4.28 |
| | Poorest 25% | average | 3.62 | 2.45*** | 5.20*** | 1.84*** | 1.36*** | 7.19*** |
| | | max | 19.11 | 11.26 | 12.37 | 11.78 | 7.18 | 19.11 |
| | | min | -9.54 | -4.99 | -2.72 | -9.54 | -5.46 | -2.76 |
| | | standard deviation | 4.12 | 3.40 | 2.82 | 3.50 | 2.71 | 4.55 |

Source: ECFIN analysis of Business and Consumer Survey Data / *** significant at the 1% level, ** significant at the 5% level, *significant at the 10% level

| | | Question 9 | | | | | | |
|--|--|--------------------|----------|----------|----------|---------|---------|---------|
| | | Average | France | Italy | Poland | Romania | Finland | |
| Aggregate Balance Difference | average | 1.06 | -0.61*** | 1.60*** | -0.12 | 2.63*** | 1.81*** | |
| | max | 9.73 | 4.10 | 9.67 | 4.93 | 9.73 | 6.07 | |
| | min | -5.27 | -4.03 | -4.03 | -5.27 | -2.97 | -2.17 | |
| | standard deviation | 2.66 | 1.54 | 3.53 | 2.07 | 2.51 | 1.52 | |
| Financial Situation | Saving a lot or saving a little | average | 0.67 | -1.03*** | 2.68*** | 0.47 | -0.22 | 1.36*** |
| | | max | 18.86 | 8.72 | 18.86 | 15.35 | 14.55 | 6.61 |
| | | min | -15.23 | -7.27 | -4.60 | -8.77 | -15.23 | -6.40 |
| | | standard deviation | 4.19 | 2.99 | 4.35 | 4.44 | 5.24 | 2.08 |
| Running into debt or drawing on savings | average | 0.70 | -0.02 | 0.42* | -0.18 | 1.47*** | 1.78*** | |
| | max | 21.82 | 9.41 | 6.87 | 12.79 | 11.78 | 21.82 | |
| | min | -19.77 | -5.32 | -7.47 | -19.77 | -12.17 | -17.64 | |
| | standard deviation | 5.25 | 2.29 | 3.05 | 6.03 | 4.48 | 7.91 | |
| Income Quartile | Richest 25% | average | 1.61 | 1.06*** | -0.60*** | 0.28 | 3.09*** | 4.20*** |
| | | max | 15.33 | 8.51 | 7.00 | 11.16 | 15.33 | 14.35 |
| | | min | -9.86 | -3.50 | -9.50 | -9.86 | -7.43 | -4.18 |
| | | standard deviation | 3.86 | 2.44 | 2.89 | 3.65 | 4.40 | 3.37 |
| Poorest 25% | average | 0.58 | -0.27 | 1.70*** | 0.59** | 1.19*** | -0.33 | |
| | max | 13.30 | 6.79 | 12.28 | 12.52 | 13.30 | 9.02 | |
| | min | -10.69 | -8.33 | -10.69 | -10.27 | -9.77 | -10.00 | |
| | standard deviation | 3.98 | 3.04 | 4.30 | 3.96 | 4.14 | 3.88 | |

Source: ECFIN analysis of Business and Consumer Survey Data / *** significant at the 1% level, ** significant at the 5% level, *significant at the 10% level

| | | Question 11 | | | | | | |
|--|--------------------|-------------|----------|---------|---------|---------|----------|--|
| | | Average | France | Italy | Poland | Romania | Finland | |
| Aggregate Balance Difference | average | 7.01 | 12.21*** | 6.75*** | 6.55*** | 5.47*** | 4.07*** | |
| | max | 20.27 | 20.27 | 14.20 | 14.57 | 11.23 | 9.10 | |
| | min | -1.63 | 0.03 | 0.67 | -0.47 | -0.20 | -1.63 | |
| | standard deviation | 4.00 | 3.94 | 2.75 | 2.79 | 2.60 | 2.03 | |
| Saving a lot or saving a little | average | 2.07 | 2.11*** | 1.96*** | 2.25*** | 1.17*** | 2.84*** | |
| | max | 11.07 | 10.09 | 10.58 | 9.00 | 11.07 | 6.04 | |
| | min | -6.90 | -5.80 | -3.82 | -6.63 | -6.90 | -0.33 | |
| | standard deviation | 2.94 | 3.55 | 2.56 | 3.18 | 3.35 | 1.19 | |
| Running into debt or drawing on savings | average | 0.83 | 3.37*** | 1.79*** | 1.51*** | 0.92*** | -3.35*** | |
| | max | 21.41 | 18.99 | 7.90 | 12.75 | 6.09 | 21.41 | |
| | min | -24.43 | -8.53 | -6.37 | -14.09 | -4.58 | -24.43 | |
| | standard deviation | 5.62 | 4.26 | 2.57 | 4.24 | 1.99 | 9.27 | |
| Richest 25% | average | 1.97 | 5.57*** | 0.58** | 1.51*** | 3.99*** | -1.63*** | |
| | max | 17.31 | 17.31 | 9.45 | 11.61 | 12.72 | 9.20 | |
| | min | -14.20 | -6.99 | -8.98 | -8.46 | -5.16 | -14.20 | |
| | standard deviation | 4.53 | 4.41 | 3.35 | 3.60 | 3.12 | 4.20 | |
| Poorest 25% | average | 2.65 | 1.29*** | 3.44*** | 4.29*** | 3.52*** | 0.67*** | |
| | max | 21.76 | 21.76 | 11.92 | 10.99 | 13.53 | 6.11 | |
| | min | -14.44 | -14.44 | -5.83 | -4.96 | -7.31 | -4.85 | |
| | standard deviation | 4.23 | 6.20 | 3.77 | 2.98 | 3.97 | 1.86 | |

Source: ECFIN analysis of Business and Consumer Survey Data / *** significant at the 1% level, ** significant at the 5% level, *significant at the 10% level

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