DISCUSSION PAPER SERIES

DP12220

FACTS, ALTERNATIVE FACTS, AND FACT CHECKING IN TIMES OF POST-TRUTH POLITICS

Oscar Barrera, Sergei Guriev, Emeric Henry and Ekaterina Zhuravskaya

DEVELOPMENT ECONOMICS and PUBLIC ECONOMICS

ISSN 0265-8003

FACTS, ALTERNATIVE FACTS, AND FACT CHECKING IN TIMES OF POST-TRUTH POLITICS

Oscar Barrera, Sergei Guriev, Emeric Henry and Ekaterina Zhuravskaya

Discussion Paper DP12220
Published 13 August 2017
Submitted 13 August 2017

Centre for Economic Policy Research
33 Great Sutton Street, London EC1V 0DX, UK
Tel: +44 (0)20 7183 8801
www.cepr.org

This Discussion Paper is issued under the auspices of the Centre's research programme in **DEVELOPMENT ECONOMICS and PUBLIC ECONOMICS**. Any opinions expressed here are those of the author(s) and not those of the Centre for Economic Policy Research. Research disseminated by CEPR may include views on policy, but the Centre itself takes no institutional policy positions.

The Centre for Economic Policy Research was established in 1983 as an educational charity, to promote independent analysis and public discussion of open economies and the relations among them. It is pluralist and non-partisan, bringing economic research to bear on the analysis of medium- and long-run policy questions.

These Discussion Papers often represent preliminary or incomplete work, circulated to encourage discussion and comment. Citation and use of such a paper should take account of its provisional character.

Copyright: Oscar Barrera, Sergei Guriev, Emeric Henry and Ekaterina Zhuravskaya

FACTS, ALTERNATIVE FACTS, AND FACT CHECKING IN TIMES OF POST-TRUTH POLITICS

Abstract

How persuasive are “alternative facts,” i.e., false statements by populist politicians, in convincing voters? How effective is fact checking in countervailing alternative facts? We conduct a randomized online experiment to evaluate the impact of alternative facts and fact checking on knowledge, beliefs, and political preferences of voters in the context of the 2017 French presidential election campaign. Marine Le Pen (MLP), the extreme-right candidate who reached the runoff, regularly used alternative facts in support of her policy proposals, to which mainstream media responded with systematic fact checking. We expose randomly selected subgroups of a sample of 2480 voting-age French to quotes from MLP and/or real facts. The results are as follows. First, alternative facts are highly persuasive. Second, fact checking improves factual knowledge of voters, but does not have an impact on voters’ policy conclusions or support for MLP. Third, providing only the true facts backfires by increasing political support for MLP compared to a control group, although to a smaller extent than alternative facts. Finally, heterogeneity of voters with respect to prior voting choices and prior knowledge is important for the effect of treatments on political preferences.

JEL Classification: N/A

Keywords: fake news, fact checking, alternative facts, elections, voting

Oscar Barrera - odbarrerar@psemail.eu
Paris School of Economics

Sergei Guriev - sergei.guriev@sciencespo.fr
Sciences Po and CEPR

Emeric Henry - emeric.henry@sciences-po.fr
Sciences Po and CEPR

Ekaterina Zhuravskaya - zhuravsk@pse.ens.fr
Paris School of Economics and CEPR

Acknowledgements
We thank Nonna Mayer for very helpful insights. We also thank Adam Berinsky, Julia Cage, Irena Grosfeld, Elise Huillery, and the participants of PSE graduate students workshop for comments. Guriev thanks Sciences Po’s Scientific Advisory Board for financial support. Zhuravskaya thanks the European Research Council (ERC) for funding from the European Union’s Horizon 2020 Research and Innovation program (grant agreement No. 646662).

Facts, Alternative Facts, and Fact Checking in Times of Post-Truth Politics *

Oscar Barrera, Sergei Guriev, Emeric Henry, and Ekaterina Zhuravskaya

July 31, 2017

Abstract

How persuasive are "alternative facts," i.e., false statements by populist politicians, in convincing voters? How effective is fact checking in countervailing alternative facts? We conduct a randomized online experiment to evaluate the impact of alternative facts and fact checking on knowledge, beliefs, and political preferences of voters in the context of the 2017 French presidential election campaign. Marine Le Pen (MLP), the extreme-right candidate who reached the runoff, regularly used alternative facts in support of her policy proposals, to which mainstream media responded with systematic fact checking. We expose randomly selected subgroups of a sample of 2480 voting-age French to quotes from MLP and/or real facts. The results are as follows. First, alternative facts are highly persuasive. Second, fact checking improves factual knowledge of voters, but does not have an impact on voters' policy conclusions or support for MLP. Third, providing only the true facts backfires by increasing political support for MLP compared to a control group, although to a smaller extent than alternative facts. Finally, heterogeneity of voters with respect to prior voting choices and prior knowledge is important for the effect of treatments on political preferences.

*Barrera and Zhuravskaya: Paris School of Economics; Guriev and Henry: Sciences Po, Paris. We thank Nonna Mayer for very helpful insights. We also thank Adam Berinsky, Julia Cage, Irena Grosfeld, Elise Huillery, and the participants of PSE graduate students workshop for comments. Guriev thanks Sciences Po's Scientific Advisory Board for financial support. Zhuravskaya thanks the European Research Council (ERC) for funding from the European Union's Horizon 2020 Research and Innovation program (grant agreement No. 646662).

1 Introduction

The recent rise of nativist populism in the West has been accompanied by politicians' extensive use of "alternative facts," statements on key policy issues that contradict real facts. Many anti-establishment politicians have used easily refutable lies to promote their political agenda. For example, pro-Brexit campaign falsely claimed that EU membership cost the UK over 350 million British pounds per week (about 500 million US dollars at the pre-Brexit exchange rate) and this money could be saved by the national budget in the case of exit from the European Union.[1] Donald Trump and his 2016 campaign staff repeatedly circulated wrong unemployment numbers for the US and made false claims that US homicide rate is at its highest in several decades.[2] As alternative facts became part of modern politics in established democracies, so did fact checking: media has increasingly invested in checking politicians' claims and provided rebuttals. For example, *Le Monde*, one of the leading French newspapers, identified and corrected 19 lies made by Marine Le Pen, the extreme-right candidate who reached the runoff of the 2017 French presidential election, during her televised debate against Emmanuel Macron.[3] Do alternative facts persuade voters? Is fact checking effective in undoing the effect of alternative facts? Our paper aims at studying these questions.

Statistical facts, those that can be checked in all objectivity, are rarely presented by politicians in isolation, instead, politicians usually embed them in a longer narrative. Consider the following quote of Marine Le Pen (MLP). On the issue of immigration, she said: *"I have seen the pictures of illegal immigrants coming down, who were brought to Germany, to Hungary, etc... Well, on these pictures there are **99**% of men (...) Men who leave their country leaving their families behind, it is not to flee persecution but of course for financial reasons."* The 99% figure was refuted by the UNHCR statistics, who reported that 58% of refugees crossing the Mediterranean in 2015 were men. The day after MLP said this, she

[1] See, for instance: http://www.telegraph.co.uk/news/0/eu-referendum-claims-won-brexit-fact-checked/ (accessed on May 26, 2017).

[2] See, for instance: http://edition.cnn.com/2017/02/07/politics/donald-trump-murder-rate-fact-check/ and http://www.npr.org/2017/01/29/511493685/ahead-of-trumps-first-jobs-report-a-look-at-his-remarks-on-the-numbers (both accessed on May 26, 2017).

[3] http://www.lemonde.fr/les-decodeurs/article/2017/05/03/des-intox-du-debat-entre-emmanuel-macron-et-marine-le-pen-verifiees_5121846_4355770.html (accessed on May 26, 2017).

was proven wrong by several media.[4] However, in addition to reporting an alternative fact, MLP presents a logical—but unproven—argument to reach a desired conclusion that migrants come for economic reasons, thus, justifying her tough line on the issue. Potentially, a political message that combines alternative facts, suggestive logical links, and conclusions may affect voter's factual knowledge, subjective impressions relevant for the policy conclusions and, ultimately, voting intentions. In this paper, we consider how alternative facts embedded in a political argument and fact checking of the actual numbers cited within the argument affect all of these potential outcomes.

In March 2017, during the French presidential campaign, we administered an online survey-based experiment to 2480 voting-age French inhabitants of five French regions with traditionally strong support for the extreme right. The sample was stratified on gender, age and education to make it similar to a nationally representative sample.

The participants were randomly allocated to four equally sized groups: (i) control group, (ii) alternative facts group, (iii) real facts group, and (iv) fact checking group. The participants allocated to different groups were asked to read different messages. The control group was presented with no information. Participants allocated to the group "Alt-Facts" (for alternative facts) were asked to read statements by MLP on immigration each containing factually incorrect information. Participants allocated to group "Facts" were asked to read information on real facts coming from official sources on the same issues. Participants of the group "Fact Check" were provided first with quotes from MLP and then facts from official sources. Whenever a statement was presented to participants, there was a clear indication of the source and date of the statement. Before being subjected to treatments, participants of all groups filled in a short questionnaire about their socio-economic background and were asked one question that aimed at measuring their prior knowledge of the statistics on immigration. After the treatments, following general questions on political opinions, participants were asked about their voting intentions as well as prior voting behaviour, their opinions on immigration policy, and their posterior beliefs about the facts, related to numbers cited in the treatments.

[4]See the article by the fact checking unit Desintox in the newspaper Liberation or Le Lab for the radio Europe1, both published on 8th September 2015, one day after Marine Le Pen made the statements.

We find that political statements based on alternative facts are highly persuasive: being exposed to MLP's rhetoric significantly increases voting intentions in favor of MLP by 7 percentage points, *irrespective* of whether they are accompanied by fact checking. Furthermore we discover a backfiring effect of the facts treatment: the voters that receive facts without MLP's statements are also significantly more likely to vote for Marine Le Pen compared to the control group. The average difference in voting intentions between the control and the Facts groups is 4 percentage points.

Does this mean that voters do not retain the real facts presented to them in the facts and fact-checking treatments? By comparing posterior beliefs about the facts, we find that voters do update in the direction of the signal they receive, placing much higher confidence in statistical facts from official sources than in alternative facts from MLP. The majority of voters presented with official statistics learn them. Voters presented with alternative facts move their posterior beliefs away from the truth, but the magnitude of the effect of alternative facts treatment on knowledge is much smaller than that of the facts treatment. Moreover, the Alt-Facts treatment does not significantly affect the rate of giving correct responses to factual questions, which means that those voters who knew correct answers to start with were not fooled by the alternative facts. In contrast, those who were far from the truth in their priors were moved even further away from the truth by alternative facts. The combination of alternative facts with facts (i.e., fact-checking treatment) shifts voter posteriors significantly toward the truth (relative to the control group). In other words, fact checking does work in terms of communicating the facts.

Better knowledge of those subjected to real facts—either through fact checking or through exposure to facts alone—does not however translate into anti-MLP policy preferences. We consider the following subjective opinions about policy issues: the answers to the questions on (i) whether refugees come for security or for economic reasons and (ii) whether the respondents agree with MLP on immigration policy. We refer to these outcomes as *impressions*. Participants in the Alt-Facts and Fact Check treatments tend to think that refugees come for economic reasons in significantly higher proportions than participants in the control group (the difference with control group is 13 percentage points for Alt-Facts and 8 percentage points for Fact Check). Participants in the Facts treatment do

not differ significantly from the control group in the assessment of reasons for refugees to come. Furthermore, all treatment groups have lower rates of disagreement with MLP on immigration policy compared to the control group. Among the respondents subjected to alternative facts, with or without fact checking, the rates of disagreement with MLP on immigration policy are the lowest and similar in level. These impressions translate into voting intentions.

We explore different mechanisms that can explain the results. We argue that the most plausible explanation is that, first, statistical figures are useful to provide credibility to the policy impressions and conclusions of MLP; second, fact checking—though improving the factual knowledge—barely changes the conclusions reached by voters. Providing the real facts in addition to MLP's statements further increases the salience of the immigration issue, counteracting any small change fact checking might have on conclusions.

Another important result of our analysis is that facts alone backfire in terms of voting intentions and policy impressions. This is consistent with the salience effect: asking questions on immigration makes the issue of immigration more salient in voters' minds and, as a consequence, increases voter support for MLP. To understand better the backfiring of the Facts treatment, we study the effect's heterogeneity in terms of respondents' priors and past voting behavior.[5] First, we consider those who did not vote for MLP in the past. In this subsample, Facts treatment increased intention to vote for MLP by 7 percentage points if respondents had wrong priors about the unemployment rate among immigrants and had no effect on intention to vote for MLP if respondents had correct priors. In contrast, among those who voted for the National Front in the past, only the individuals with correct priors reacted to the Facts treatment by increasing their intention to vote for MLP. (This effect amounts to 13.5 percentage points compared to the control group.)

In the analysis above, we use the self-reported voting intentions as the main political outcome. We show that voting intentions are not just a cheap talk, using two different methods. The survey participants were asked to play two dictator games with real payoffs: one with a random anonymous counterpart among survey participants and the

[5]In order to measure the prior beliefs we ask the participants before the experiment about the unemployment rate among immigrants. MLP's argues that immigrants come to France to enjoy its generous welfare system and are much likelier to be unemployed than the native French population.

other with an anonymous counterpart randomly chosen among survey participants who said that he or she intended to vote for MLP. First, we show that larger donations to MLP supporters are associated with the intention to vote for MLP. Second, we show that alternative facts treatment significantly reduces the share of respondents who chose to donate to a random participant, but does not share any money with a MLP supporter. The effects of other treatments on dictator game outcomes are imprecisely estimated, but the signs of the coefficients are consistent with the effects of treatments on voting intentions.

We also carry out a list experiment designed to infer the average support for MLP within a group of participants without having the participants admit that they support MLP. This was done to further validate our voting intention measure that could be biased if some respondents preferred to hide their support for MLP. We presented each respondent with a list of presidential candidates and asked how many of them they would support, without asking the names. One half of these lists included the names of four presidential candidates and did not include MLP; the other half listed the same four names plus MLP. We randomized both the lists with and without MLP's name and the order of candidates within each list. The average difference in the responses about the number of candidates between lists with and without MLP is a measure of inferred average support for MLP. We find a statistically significant correlation between the responses to the question about voting intentions and the support for MLP inferred form the list experiment. Differences in inferred support for MLP across treatments are not statistically significant due to a small sample size, but they line up in a way consistent with the effect of treatments on voting intentions.

Our main contribution to the literature, which we briefly review in the next section, is to identify the causal effect of alternative facts and of fact checking in a real-world setting. We subject the experiment's participants to the real quotes from a leading presidential candidate on a key policy issue in the middle of a presidential campaign and to facts from official sources. We show that factual knowledge is disconnected from policy conclusions and voting intentions of voters. While fact checking helps to improve knowledge of facts, it does not reduce the support for the populist politician. We also show that factual information can backfire by moving voters closer to the extreme policy position of

a populist politician, despite moving the posterior on facts closer to the truth.

The rest of the paper is structured as follows. Section 2 discusses the related literature. Section 3 describes the design of the study. Section 4 presents the main results and discusses mechanisms. Section 5 establishes the validity of our measure of voting intentions and examines heterogeneity of the results. Section 6 concludes.

2 Literature

The impact of information on political preferences and outcomes has been extensively studied in the context of traditional media. Several studies (e.g., Gerber et al., 2009; DellaVigna and Kaplan, 2006; Enikolopov et al., 2011) established the causal impact of mainstream media on political outcomes even in the cases where the media were known to be politically slanted. Recently, there has been a major increase in circulation of biased or outright false news following the rise of new online media and especially social media — where fact checking standards are lax or missing. Mocanu et al. (2015), for example, document the rapid spread of fake news over social media during the 2012 elections in Italy. They show that misinformation is more likely to be shared by the users who mistrust the mainstream media. Allcott and Gentzkow (2017) examine whether fake news influenced the outcome of the 2016 election in the USA and conclude that this was unlikely.[6] However, they document that fake stories were indeed intensely shared on social media and that stories in favor of Donald Trump were shared on Facebook more widely than those in favor of Hillary Clinton (about 30 million vs. 8 million shares). Bursztyn et al. (2017) show the causal impact of Donald Trump's rise on the willingness to express xenophobic opinions publicly. Two weeks before the US 2016 presidential election, the authors carried out an experiment with 458 respondents from eight states where Trump's victory was highly likely. The treatment group was informed about the local odds of Trump's victory (i.e., close to 100%). This group was then more likely to agree with an anti-immigration policy statement and more likely to make a publicly observed donation

[6]The authors admit that this is a very tentative conclusion as it depends on how fake news impact voting intentions, as compared for instance to campaign ads.

to an anti-immigration NGO.

One of the goals of this paper is to examine how fact checking affects political beliefs and voting intentions. While there is a growing literature in political science and psychology (that we briefly review below) on the impact of information on political beliefs, there are very few systematic randomized studies of the impact of fact checking on subjective beliefs and voting intentions. Swire et al. (2017) conducted a randomized controlled trial treating the participants with Trump's misinformation with and without attribution to Trump, subsequently correcting the misinformation either immediately or one week later. The main focus of the study is on the role of source attribution. They found that the impact on the beliefs did depend on attribution to the source and on the partisanship (i.e., whether the participants were Trump supporters to start with). Using within subject variation (rather than comparison across treatments), they also found that Trump supporters did not change their voting behavior after seeing the corrective information even in the case where the initial false information was attributed to Trump.

A concurrent paper Nyhan et al. (2017), in the spirit of Swire et al. (2017), shows, in the context of the US Presidential elections of 2016, that when Trump's lies are corrected, even Trump voters update their factual beliefs. However the fact that the candidate they support has been shown to exaggerate the truth does not affect the support of Trump voters. These results are similar to ours although there are two major differences. We focus on facts used in a populist narrative and show that fact checking cannot change policy conclusions promoted by the populist politicians; we find that this is true for both supporters and non-supporters of MLP. Furthermore, Nyhan et al. (2017) do not include a Facts treatment (i.e., providing factual information without quotes of Trump). In this sense, our paper also delivers additional results on the backfiring of the factual information (through raising salience of the populist agenda).

Grigorieff et al. (2016) carried out randomized experiments measuring the impact of information on the attitude towards immigrants. First, they have informed randomly selected half of a large sample of 19000 individuals from thirteen countries to factual information on the true share of the immigrants in their countries. The treated participants were less likely to say that there are "too many immigrants" in their country although

they kept the same degree of concern about immigration as the control group. The second and the third experiments were carried out on two representative samples of the US population (1200 and 800 respondents, respectively). In this case, the treatment included informing the participants not just about the share of immigrants but also about the share of illegal immigrants, the unemployment rate among immigrants, their incarceration rate of immigrants, and the share of immigrants who cannot speak English. In these experiments, information treatment also increased positive attitude towards immigration.

Several studies have examined the backfiring effect where providing information shifts participants' beliefs in the direction opposite of what the content of the information would imply. Nyhan (2010) carries out a randomized control trial where one group is shown a mock news article reporting George W. Bush remarks on the presence of weapons of mass destruction in Iraq; another group is shown the same article but is then informed of the Duelfer Report that showed the lack of such weapons. The authors show that the correction had on average no effect and even had a backfiring effect for those with ideology favoring the Republicans (taken as an indicator of prior beliefs). Such backfiring effect was also identified for vaccine safety (Nyhan and Reifler, 2015). However there have been no backfiring for less salient issues. (For example, the effect of news on the weapons of mass destruction in Iraq in 2005 was not replicated in 2006.) Swire et al. (2017) synthesize the literature on these issues as "backfire effects only occur when an issue is strongly and currently connected with an individual's political identity." Hatton (2017) makes a similar argument analyzing the survey data on Europeans' attitudes to immigration. He shows that public opinion on immigration in Europe depends on both preferences and salience of the immigration issue. In a large scale study, Wood and Porter (2016) show that among 36 issues potentially subject to backfiring, there is some consistent albeit weak evidence of backfiring only for the news on the weapons of mass destruction.

Backfiring can be explained by motivated cognition (or the "self-confirming bias") where information is evaluated in a biased way to reinforce pre-existing views (Lord et al., 1979; Edwards and Smith, 1996; Taber and Lodge, 2006). Bénabou and Tirole (2016) provide a recent review of this literature and discuss many other examples of motivated beliefs and self-deception. They suggest three strategies that help limiting costly cogni-

tive dissonance: strategic ignorance, reality denial and self-signaling. Strategic ignorance involves choosing to avoid information sources that contradict the preferred beliefs. Reality denial is the failure to update the beliefs even in the presence of the bad news. Finally, self-signaling is the manufacturing of signals that can be interpreted as the objective proof of desired conclusions. While our experiment does not allow for a direct test of self-signaling, we can distinguish between strategic ignorance and reality denial. Our respondents do learn the facts but fail to update based on the incoming facts. Thus, our results are consistent with the importance of reality denial rather than strategic ignorance.

Another explanation of backfiring is provided by Berinsky (2015) who shows that rumors may gain power due to "fluency." Attempts to refute the rumors on the healthcare reforms using credible sources (that provide information against the rumors) may backfire: repeating the rumor increases its spread and therefore makes it stronger. This result is similar to what we find although there is a major difference: in our experiment, backfiring occurs when we provide Facts alone, without any reference to MLP or any other politician.

Several studies (e.g., Berinsky, 2015) have documented how the effect of information treatments evolves over time. We study the immediate effect only; and it is possible that the impact of treatments on all the outcomes including knowledge of facts gradually fades over time. What we do show is that even when fact-checking improves factual knowledge (before its impact could fade away), its does not affect policy conclusions and voting intentions.

3 Experimental design

3.1 Context

We use the context of the French presidential election involving an extreme-right candidate Marine Le Pen. The 2017 French presidential election was held on April 23 (first round) and May 7 (runoff). It attracted global attention for a number of related reasons. First, this election witnessed the downfall of traditional parties: the candidates from both

mainstream parties, one on the right (LR) and the other on the left (PS), did not qualify for the second round. Second, this election led to the victory of a relative newcomer in politics, who created his party a few months before the election and ran on a pro-European platform. Finally, candidates from populist parties, both of the extreme left (Jean-Luc Melenchon) and the extreme right (Marine Le Pen) performed very well.

Marine Le Pen's strong results in 2017 elections followed a series of electoral successes of the National Front, MLP's party, in the previous years. In the elections of the European Parliament in May 2014 the FN (for National Front or *Front National* in French) came first with nearly 25% of the votes. In the regional elections of December 2015 it nearly won several regions in spite of an alliance between the other main parties. Throughout the 2017 campaign, Marine Le Pen was expected to get into the runoff polling first or close second. The final result was considered disappointing for MLP. She did qualify for the second round but by a relatively small margin (21% of votes against Emmanuel Macron's 24% and Francois Fillon's 20%) and lost by a large margin in the second round with 34% of the total vote.

3.2 Facts and alternative facts

Following an influx of refugees in Europe, the issue of immigration policy played an important role in the 2017 presidential campaign. Tough stance on immigration policy was one of MLP's key messages. She proposed to close the French borders to migrants and in general limit legal immigration. To convince voters that such tough measures were acceptable, MLP tried to persuade voters that immigrants, including refugees, come to France for economic rather than security reasons and, in particular, to benefit from the generous French welfare system. She often provided factually incorrect numbers, always with a lot of prudence in the way they were expressed, and provided arguments that used these erroneous numbers to make her point.

In the experiment, we use three quotes from MLP, which were characteristic of the arguments she made during the campaign. The first argument she made was as follows: *if refugees were really fleeing their countries for security reasons, they would not leave their fam-*

ilies behind. To back up this argument, she suggested that the proportion of men among migrants was very high, quoting a false figure. The second argument was that *migrants come to France to benefit from the generous welfare system*, using a fake number on the proportion of immigrants working. The third argument was a moral judgement on refugees fleeing their respective countries: she said that *if it had been really a security issue that drove the refugee to flee, they should have really stayed and fought for their countries, as the French did during the Second World War*. The comparison with French is questionable, as a quarter of the French population fled from the North to the South of the country during the Nazi occupation.

All the *alternative facts* on which MLP based her arguments can be checked using official sources, such as the UN High Commissioner for Refugees (UNHCR) and INSEE, the French statistical institute. Each of the statements of MLP that we use for the experiment were made in the media and were subsequently fact checked by the newspaper *Liberation* and/or the online edition of the radio station Europe 1.[7] Below, we present the precise quotes of MLP and the corresponding facts as presented to the survey participants.

Argument 1: If refugees had really been fleeing their countries for economic reasons, they would not have left their families behind.

- **Alternative fact:** *MLP: "A very small minority of them are really political refugees (...). I have seen the pictures of illegal immigrants coming down, who were brought to Germany, to Hungary, etc... Well, on these pictures there are* ***99%*** *of men (...). Men who leave their country leaving their families behind, it is not to flee persecution but of course for financial reasons. Let's stop telling stories. We are facing an economic migration, these migrants will settle."*[8]

- **Fact:** *The UNHCR estimates that among the migrants crossing the Mediterranean in 2015,* 17% *are women*, 25% *are children and* ***58%*** *are men.*

[7] In the Facts and Fact Check treatments we did not expose participants to the actual published fact-checking articles; we only showed short factual statements containing the statistical figures.

[8] Source: http://lelab.europe1.fr/marine-le-pen-affirme-a-tort-que-les-refugies-sont-tres-majoritairement-des-migrants-economiques-debarquant-sans-leur-famille-2511737 (accessed on July 15, 2017).

Argument 2: Migrants come to benefit from France's generous welfare system.

- **Alternative fact:** *MLP: "*5% *of the foreigners who come to France have a work contract. This means there is* 95% *who come to France who are taken care of by our nation (...). There are* ***95****% of people who settle in France who don't work, either because of their age, either because they can't as there is no work in France."*[9]

- **Fact:** *According to the National Statistics Institute (INSEE) in 2015,* 54.8% *of the immigrant population were in the labor force (working or looking for a job) against* 56.3% *for the rest of the French population. The rate of unemployment for the immigrant population is* 18.1% *against* 9.1% *for the rest of the population. There is therefore* ***44.9****% of the immigrant population that works (*55.1% *for the rest of the population).*

Argument 3: Refugees should really not flee but fight.

- **Alternative fact:** *MLP: "Everyone of us has good reasons to flee war, but there are also some who fight. Imagine during the Second World War, there were surely many French, believe me, who had good reasons to flee the Germans and yet, they went to fight against the Germans."*[10]

- **Fact:** *During the First and Second World Wars, the French fled war zones in much larger numbers than the current refugees. After the defeat of the French army in the North of France in the Spring 1940, 8 million civilians, that is one quarter (***25%***) of the population of the time, took the road to go to the South of the country that was not occupied (according to Jean-Pierre Azema, a renowned French historian).*

3.3 Setup of the experiment

In March 2017, one month before the first round of the presidential election, we conducted an online survey of 2480 French voting-age individuals using the Qualtrics online platform, analogue of Amazon Mechanical Turk.

[9]Source: http://www.liberation.fr/france/2013/12/09/le-pen-met-les-immigres-au-chomage-force_965300 (accessed on July 15, 2017).

[10]Source: http://lelab.europe1.fr/refugies-comme-nadine-morano-marine-le-pen-prend-lexemple-des-francais-qui-sont-alles-se-battre-contre-les-allemands-pendant-la-seconde-guerre-mondiale-2515045 (accessed on July 15, 2017).

The survey consisted of four parts. In the first part, we asked all participants a series of questions regarding their socio-economic characteristics, such as age, gender, education, income, religion. In addition, the first part of the survey included a question measuring the respondents' prior knowledge of facts related to immigration. In particular, we asked: "What do you think the unemployment rate among immigrants was in France in 2015?" The respondents were asked to choose the response from 10 intervals: (1): 0-10%, (2): 11-20%, ..., (10): 91-100%.

The second part of the survey was the one that varied across treatments. The participants were randomly allocated to four equally sized groups. Each participant in three out of four groups was asked to read a short text before going to the third part of the survey. The texts were different across groups. In the online appendix, we present the full text of each treatment.

- *Control group (Control)* received no text to read, and the respondents were immediately directed to the third part of the survey;

- *Alternative facts group (Alt-Facts)* was presented with a one-sentence introduction ("*You will read several statements by Marine Le Pen about migrants: their reasons for coming, the impact of migrants on French working and retired population; read them carefully*"), and then read quotes from MLP containing alternative facts, including those that we presented in the previous section, stating the exact date these statements were made;

- *Facts group (Facts)* was presented with a different one-sentence introduction ("*You will read below several numbers about migrants related to their reasons to come and their impact on French working and retired population; read them carefully*") followed by the real facts corresponding to alternative facts from the MLP's quotes, stating their official sources;

- *Fact-checking group (Fact Check)* was first presented with the same text as the Alternative facts group followed by exactly the same text as in the Facts group.

The third part of the survey was designed to measure voting intentions and attitudes

toward MLP's program. In addition to asking a set of questions regarding voting intentions, we carried out the list experiment. We also used two dictator games: the first one played with a random participant and the second played with a participant who reported that he/she was likely or very likely to vote for MLP.

The fourth part of the survey examined opinions on the reasons for migration, asking the participants whether they thought migrants were coming for security or economic reasons and then tested the participants knowledge on the three main facts used in the study.[11]

3.4 Sample, balance across treatments and descriptive statistics

The survey respondents were drawn at random from a pool of Qualtrics subscribers, individuals who participate in online surveys for pay. The sample was drawn from five French regions, presented in Figure A1 in the online appendix. These five regions traditionally had relatively high support for the National Front; they were chosen to guarantee a sufficient proportion of FN supporters among respondents. The regions are Hauts de France, Provence-Alpes-Cote d'Azur, Occitanie, Grand Est et Centre Val de Loire. Most of our sample comes from the region Hauts-de-France (35,8%), followed by Provence-Alpes-Cote d'Azur (26,1%) and Grand Est (19%).[12] MLP performed relatively well in these regions in the 2017 election: they ranked 1st, 2nd, 3rd, 6th, and 7th out of 13 regions of mainland France in terms of MLP's vote share in the first round and 2nd, 3rd, 4th, 6th, and 7th in the second round of the presidential election. The vote for MLP by municipality in the first round of the election is presented in Figure A2 of the online appendix.

We stratified our sample on education, age and gender by treatment. The sampling quotas were designed to make the sample as representative of French adult population eligible to vote as possible.[13]

[11]The questionnaire translated into English is presented in the online appendix. The original survey in French is available online at: *https : //survey.eu.qualtrics.com/jfe/form/SV_cZ80nbVMLPTfvYFj* (accessed on June 12, 2017).

[12]The respective population of these regions in 2016 was Hauts-de-France 6 million, Occitanie 5.7M, Grand Est 5.5M, Provence-Alpes-Cote d'Azur 5M and Centre Val de Loire 2.6M. The unemployment rates in these regions was as follows in 2016: 12.2 for Hauts de France, 11.7 for Provence-Alpes-Cote d'Azur, 11.7 for Occitanie, 9.9 for Grand Est and 9.6 for Centre Val de Loire.

[13]Qualtrics allowed for three levels of quotas. We imposed quotas on gender (50% male, 50% female), on

Table A1 in the online appendix summarises all variables used in the analysis. The first four columns present summary statistics for the whole sample and the last four columns present the means by treatment groups. [14]

In line with the results of the European elections of 2014, regional elections of 2015, and the presidential elections of 2017 in the regions from which the sample was drawn, 34% of the sample voted for the National Front in the past and 22% of the sample voted for Marine Le Pen in the previous presidential election. Television is the main source of information for the majority of respondents, that is 61% of the sample, whereas about 22% of the sample prefer to get information from the Internet and only 10% of the respondents use radio as their main source of information. In addition, we observe that our sample has a strong representation of Catholics (57%) and those who reported no religion (37%). Together, Catholics and non-religious make about 94% of the sample.

Table 1 presents the p-values for the test of the difference in means between the four randomized groups. Column 1 shows the mean difference between the Control and Alt-Facts groups, column 2 is the mean difference between Control and Fact, column 3 is the difference between Control and Fact Check; the remaining columns are the respective mean differences between treatment groups. The table suggests that the four randomized groups are balanced in observable characteristics. We only observe an imbalance in the proportion of wage earners vs. pensioners: wage earners are 7 and 5 percentage points more frequent in fact-checking group and in facts group, respectively, compared to control and alternative facts groups; and there are no significant differences between control and Alt-Facts groups and between Facts and Fact Check groups. In all regressions that we present below, we control for a dummy indicating whether respondent is a wage earner as well as other socio-economic characteristics.

birth year (25% 1981 - 1989, 45% 1956 - 1980, 30% $\leq$ 1955), on education (below high school 72%, undergraduate degree 12%, graduate degree 16%).

[14] Most of the variables are dummies, with the exception donations in dictator game, measured in euros, age, measured in years, income, which is a categorical variable with categories from 1 to 10, and the political score on left-right axis, which is also a categorical variable taking values from -5 (extreme left) to 5 (extreme right).

3.5 Variables

3.5.1 Voting intentions

Participants were asked how likely they were to vote for MLP in the upcoming presidential election using a four-point scale ("very unlikely", "unlikely", "likely", "very likely"). We also created a binary measure of voting intentions that indicates whether the respondent self-reports that she is "likely" or "very likely" to vote for Marine Le Pen. To check whether self-reported measure is a valid measure of support for MLP, we use two additional methods to measure political preferences. The first is the list method (as described in Blair and Imai, 2012). Each respondent is randomly allocated to one of the two groups: participants in the first group are presented with a list of four key MLP's competitors in the 2017 presidential elections: Francois Fillon, Benoit Hamon, Emmanuel Macron, Jean-Luc Melenchon (in random order). Participants in the second group are presented with a list of five candidates, which includes the four who appear in the list of the first group plus Marine Le Pen, also in random order. Then, all respondents, irrespective of which list they see, are asked programs of how many politicians they support overall. There are no questions about *which* politicians the respondents support — the respondents only are asked to give the number of supported candidates. Due to the law of large numbers, the average difference in the number of supported politicians between the two groups reveals the average support of Marine Le Pen in the population.

The second approach is based on the dictator game with real payoffs. All participants played two dictator games in a row. In the first they were asked how much out of 10 euros they would send to another randomly selected participant of the study. In the second game participants were asked how much out of 10 euros they would send to another randomly selected participant of the study among those who reported he/she was likely or very likely to vote for MLP. The difference in amounts transmitted between the first and the second game can be seen as a measure of support for MLP. The literature shows a strong in-group bias for supporters of the same party in such dictator games.[15]

[15]For instance, Fowler and Kam (2007) found that Democrats and Republicans in the US both give more to the anonymous experiment participants from their own party than to those from the opposing party. In addition, they observed that independents give more to independents than to partisans, while partisans

3.5.2 Partisanship

As it is often harder to influence voting intentions of partisan voters, we asked respondents about their past voting behaviour. In particular, we asked whether respondents voted for MLP or for the National Front in the past. In order not to contaminate the experiment by framing effect or other aspects of cognitive dissonance, we asked these questions after the experiment (in the third part of the survey). This, however, means that the answers to these questions could potentially be affected by the treatment. We test for differences in responses to these questions across treatments and find no statistically significant differences, as reported in Table 1, when we correct standard errors for multiple hypothesis testing. However, if we do not make such a correction, there is a small but statistically significant imbalance in past voting for FN. We find a 5 percentage point higher share of those who declared having voted for FN in the past in the control group compared to all other treatments. Note that in all regressions in the paper we control for the dummy indicating whether respondent voted for FN in the past. All the other dimensions of past voting behavior are balanced across treatments, including the past vote for MLP.

In our sample, 34% of respondents reported having voted for FN and 21.6% having voted for MLP in the past. These numbers are consistent with the past aggregate election results in the regions that we study.

3.5.3 Prior knowledge

In order to test how the effects of alternative facts and fact checking depends on the knowledge of voters about the subject matter, we need a measure of prior beliefs. In the first part of the survey, before the experiment, all participants were asked about their beliefs on the rate of unemployment among the immigrant population in 2015. The priors are balanced across the four treatments as can be seen from the bottom row of Table 1.

Figure A3 in the online appendix also shows that on average, the beliefs are centered around the truth (18%) and that there is heterogeneity in priors among survey partici-

behave in the opposite way (see also Rand et al., 2009).

pants. In particular, less educated respondents are more likely to make mistakes than more educated respondents. Those, who voted for FN in the past, are more likely to overstate the level of unemployment among migrants. Participants from regions with higher unemployment rates also more likely to report higher numbers.

4 Results

The experimental design allows us to measure the impact of alternative facts and fact checking on voting intentions and understand whether it is driven by differences in knowledge of facts or by impressions about policy conclusions. We address the following questions: How do different treatments affect voting intentions? Do the participants learn factual information differently depending on who provides it? Does knowledge of facts translate into opinions on the reasons for migration? Do policy conclusions translate into voting intentions?

We first discuss how the treatments affect these outcomes on average and then study the mechanism and heterogeneity in the effects.

4.1 The average treatment effect

Figures 1-5 provide an illustration of the main results by plotting the distributions of raw outcome variables across treatments. Due to randomization and balance across treatments, our empirical methodology is based on a simple comparison of means. To make the estimates more precise, we control for the conventional determinants of political preferences. In particular, we regress the outcomes on dummies indicating each of the three treatments, namely, Alt-Facts, Fact Check, and Facts (our main variables of interest) controlling for gender, age (linearly and as a dummy for each age quota), family status, income (with dummies for each of the 10 income categories), education (with dummies for each of the 9 education levels), regional dummies, religion dummies, and a dummy indicating that the respondent is a wage-earner. In order to control for prior voting behavior, we add a dummy for whether the respondent reported having voted for FN in

the past to the list of covariates. In all the reported results, we adjust standard errors for heteroscedasticity.

In Table 2, we present the results for the main outcomes. Column (1) shows that the exposure to MLP's rhetoric, *with or without* the additional fact checking from official sources, results in an additional 7 percentage points in terms of intention to vote for MLP relative to the control group. In addition, being exposed only to facts from official sources leads to an *increase* in the voting intentions for MLP of 4.6 percentage points compared to the control group. The last four rows of the table report the p-values of the tests for the equality of the effects between different treatments (Alt-Facts vs. Fact Check; Facts vs. Fact Check; and Alt-Facts vs Facts) and of the test for whether the coefficient on the Fact Check treatment is equal to the sum of the coefficients on the Alt-Facts and Facts treatments. The point estimates of the effects of the Alt-Facts and Fact Check treatments are virtually identical. The point estimate of the effect of Facts treatment is substantially smaller in magnitude than that of the other two treatments; however, we cannot reject the equality of the effects across all three treatments. The magnitude is large compared to the average intention to vote for MLP in the Control group, which is equal to 37.3% (as reported at the bottom of the table). Figure 1 illustrates these results in the absence of controls.

The comparison of the effects of Alt-Facts and Fact Check treatments suggests that fact checking is completely ineffective in undoing the persuasion effect of populist arguments based on alternative facts. Does this mean that fact checking fails in communicating the facts or that voters distrust official sources more than MLP? Columns (2)-(5) of Table 2 address this question. In column (2), the dependent variable is the distance between individual (posterior) responses and the true values for the proportion of men among refugees crossing the Mediterranean. In column (3), it is the distance between the responses and the true values of the share of working among migrants. In columns (4) and (5), the dependent variables are the dummies for correct responses to these questions. We find that participants do learn the statistical facts when the facts are provided to them. Both alternative facts and facts are effective but participants attach a much higher weight to the official sources compared to MLP. The distance to true value for both questions decreases

substantially after the Facts treatment and slightly increases after the Alt-Facts treatment; both effects are statistically significant. The absolute value of the point estimate is much smaller for Alt-Facts treatment than for the Facts treatment. Furthermore, the Fact Check treatment significantly reduces the distance to truth compared to the control group, suggesting that information from official sources dominates the effect of alternative facts. The effect of the Fact Check treatment on the distance to truth is similar in magnitude to the sum of the positive effect of the Facts treatment and the negative effect of the Alt-Facts treatment.

We compare the shares of participants who report the correct answers across treatments in columns (4) and (5). Alt-Facts treatment does not significantly affect the probability of being correct on either of these factual questions in sharp contrast to both Facts and Fact-Check treatments. The comparison between the results presented in columns (2) and (3) vs. columns (4) and (5) implies that MLP manages to change the opinion about the facts only among those who did not know these facts to begin with. Facts and Fact-Check treatments increase the probability of a correct response about the share of men among refugees by 44 and 31 percentage points from the baseline level of 16% (the share of correct responses in the control group) and increase the probability of a correct response about the share of working among migrants by 37 and 22 percentage points from the baseline of 17%. These effects are illustrated in Figures 2 and 3.[16] Overall, we find overwhelming evidence that participants learn the facts whenever exposed to them.

The knowledge of facts, however, does not translate into changes in the impressions on the reasons for migration, as can be seen in Figure 4. Participants in both the Alt-Facts and the Fact Check group are more likely to believe that migrants come for economic reasons. Moreover, the difference between the two groups is small. Fact checking corrects the

[16]Table A2 and Figure A4 in the online appendix present the results for the effect of the treatments on the respondents' knowledge about the percentage of French population that fled to the South during the Second World War. We find no significant effect of any of the treatments for the distance to truth, but for the probability of the correct response, treatments have similar effect as for getting correct responses on other factual questions: Alt-Facts had no effect, while Facts and Fact Checking groups have significantly higher rate of correct responses (by 10 and 13 percentage points, respectively) compared to the Control group, in which 5% of respondents gave the right answer. Note, however, that on this particular question, MLP did not provide an actual alternative figure but just suggested that the French had not fled but had fought during the war. We relegate these results to appendix because there are no explicit alternative facts.

factual knowledge, but not the conclusions advocated by MLP. Similarly, the Facts treatment does not affect the policy-relevant impressions at all. These results are presented formally in column (6) of Table 2. The alternative facts treatment reinforces the belief that refugees come for economic reasons by 13 percentage points and the fact checking treatment by 8 percentage points compared to the 32% mean in the control group.

Finally, both the discourse of MLP (Alt-Facts) and the information from official sources (Facts) make people disagree less with MLP on immigration policy, as illustrated by Figure 5 and shown in column (7) of Table 2. Fact checking also does not correct in any way the effects of propaganda on the disagreement with MLP on immigration policy. Participants in the Alt-Facts and the Fact Check groups are 7 and 6 percentage points less likely to disagree with MLP than those in the control group. The rate of disagreement with MLP is 4 percentage points smaller in the Facts group compared to the control (in the control group, 47% of respondents disagree with MLP). Thus, the attitudes towards immigration policy are closely related to voting intentions. The sign of the effects of all treatments on the disagreement with MLP on immigration policy is consistent with the effects of the treatments on voting intentions: we see both a high persuasion effect of MLP's argument and a backfiring effect of the provision of facts on immigration from official sources.

Overall, we find that alternative facts treatment is very persuasive, fact checking corrects the beliefs about facts but does nothing for policy impressions and voting intentions; and information from official sources, although learned, backfire in terms of voting intentions and opinion on policy. The rest of the paper is devoted to understanding the mechanisms behind these results and the analysis of the heterogeneity in treatment effects.

4.2 Exploring the mechanism

4.2.1 Facts and policy conclusions

The results presented in the previous section may be explained by the following mechanism: while the use of (fake) statistical numbers provides credibility to the statement of a populist politician, the voters remember only the main message of the statement, and base their conclusions on impressions caused by this message rather than on the numbers.

This explanation implies that the effect of treatments on voting is mediated by impressions. We explore this issue in Table 3. For the sake of comparison, we restate the main result on voting intentions in Column (1). In columns (2)-(4), we add impressions to the list of covariates: the respondent's beliefs about refugees' reason for migration (column (2)) or the disagreement with MLP on immigration issues (column (3)) or both (column (4)). We find that these variables are significant and the correlation between voting intentions and impressions is large. Those who believe that refugees migrate for economic reasons are 15 percentage points more likely to vote for MLP; those who disagree with MLP on immigration are 42 percentage points less likely to vote for her. However, the effects of treatments on voting intentions are only partially mediated by the effect on impressions. Even after controlling for impressions, respondents in Alt-Facts and Fact Checking groups are 3.5 and 4.6 percentage points more likely to vote for MLP compared to the control group (according to column 5). These effects are smaller than the magnitude of 7 percentage points for both treatments in the regression without impressions as control (column (1)), but they are still statistically significant.

Therefore, even though the explanation above may be valid, it cannot explain the full impact of the treatments. The part which is not explained by it could be explained by salience. The treatments have an impact on the voters' perceptions, but they also increase the salience of the immigration issue in their minds. As the position of MLP on this issue is common knowledge, thinking about the problem of immigration makes voters lean towards MLP. The salience mechanism implies several testable predictions. First, the effect of the Facts, Fact Check and Alt-Facts treatments, after controlling for updated impressions and/or posteriors on facts, should be positive, as all three of these treatments call voters' attention to the issue of immigration. Second, controlling for impressions and/or posteriors on facts, the effect of the fact checking treatment should be larger in magnitude than that of either Alt-Facts and Facts treatments because fact checking contains longer text about immigration than the other two treatments. We test these predictions in columns (4) and (5), in which we include policy impressions and posteriors on facts to the list of covariates. We do find that point estimates for all treatments are positive and that the magnitude of the effect of fact-checking treatment is larger than of the other two

treatments. We however, lack precision to reject the equality of the coefficients on all three treatments.

Thus, the following two mechanisms could be at play at the same time: first, alternative facts may give credibility to policy conclusions of populist politicians, and once conclusions are accepted, correcting facts with fact checking has little effect on changing conclusions; second, an increased salience of immigration issue moves voters towards the position of the anti-immigrant politicians. (We will come back to the issue of salience below in section 4.2.2.)

Let us consider alternative explanations. First, the residual effect of the Alt-Facts and Fact Check treatments after controlling for our measures of impressions could be explained by the fact that MLP's statements include other dimensions than immigration. For example, the second quote by MLP mentions the economy. This, however, could not explain the effect of the Facts treatment, as the comparison of knowledge of facts in the Control group and in the Facts treatment group suggests that the information contained in the Facts treatment could not have made respondents believe that the situation with immigrants is worse than they originally thought.

Second, it could also be the case that MLP's quotes convince participants that there exists a link between statistical facts and conclusions (for example, MLP connects the proportion of men refugees with the reasons for them to come) and whether the link is computed with a very high number (such as 99% for the share of men-refugees) or a relatively high number (58%) makes little difference. We examine the validity of this explanation in Table 4. In particular, we check how voters perceive the logical argument, i.e., how they link their posterior beliefs on facts to policy impressions. We focus on Alt-Facts and Control groups in this analysis as the Facts treatment only presents facts and does not present policy conclusions or the link between facts and policy conclusions. In order to test for the effect of Alt-Facts treatment on the link between fact and policy conclusions, one needs an exogenous source of variation for the posterior belief on facts that is independent of the treatment, since posteriors, conclusions, and links might be independently affected by the treatment. We use the answers to the question asked *before* the treatments on the rate of unemployment among the immigrant population as a source

of such exogenous variation. First, we show that the respondent's posterior knowledge about the share of men among refugees is strongly correlated with the prior on unemployment among immigrants in both Alt-Facts group and Control group, as presented in columns (1) and (2) of Table 4, respectively.[17]

In columns (3) and (4) of Table 4, we present the results of OLS and IV regressions, in which we regress the impressions about the reasons for migrants to come on the posterior beliefs about the share of men among refugees allowing this relationship to vary between Control and Alt-Facts group.[18] In column (4), we instrument the posterior with the prior and the posterior interacted with Alt-Facts treatment with prior interacted with Alt-Facts treatment. In column (5), we also report the reduced form relationship. We repeat this analysis for the disagreement with MLP on immigration as outcome variable in columns (6)-(8). We present F-statistics for the excluded instruments in the bottom row of the Table.

Irrespective of specification, we find that Alt-Facts treatment has no significant effect on the link between facts and impressions, once we instrument the facts with priors.[19] The results in Table 4 therefore invalidate the hypothesis that MLP's statements convince voters about the logical link between facts and impressions and therefore we can reject this alternative interpretation of the results.

4.2.2 Backfiring of stand-alone facts

As shown in section 4.1, the Fact treatment backfires on voting intentions and policy impressions. In order to understand the mechanism behind this result, we explore two dimensions of heterogeneity: (i) the ex ante knowledge of the respondents measured by whether they had a correct prior about the unemployment rate among immigrants and (ii) their prior political behavior measured by a dummy for whether respondents had

[17] In Table A3 in the appendix, we show that the posterior beliefs about the share of working among migrants or the posterior about the rate of unemployment (which we calculate from the posteriors about the share of working among migrants and the share of men among migrants) are less strongly correlated with the prior on the unemployment rate among migrants in the Alt-Facts group, presumably because MLP affects the posterior knowledge of facts by providing voters with alternative facts.

[18] We focus on these two treatments in order to reduce the number of instruments and of endogenous regressors. As the Facts treatment is irrelevant for the study of the link, as we mention above, we do not consider it.

[19] We only use the factual information the share of men among refugees. For the other factual information, the F-statistics for the excluded instruments are not sufficiently strong.

voted for the National Front in the past (hereinafter referred to as "partisans").

First, we note that neither of these two variables alone has a significant average impact on the effect of the treatments on voting intentions — as shown in Panels A and B of Table A4 in the online appendix. The Table presents the coefficients of the interaction terms between treatment dummies and these two variables (as well as a few other variables). We do see from Panel A that incorrect priors make people less willing to adjust their posteriors on facts after having been exposed to official information in Fact-Checking and Facts treatments (columns (2) and (3)).[20]

The average effect of the interaction between prior beliefs and treatments does not translate into a differential effect on voting intentions. As shown in the column (1) of Panel A of Table A4, the impact of treatment on voting is the same for individuals with correct and incorrect priors. This relationship, however, masks important heterogeneity with respect to partisanship. Table 5 examines how the prior knowledge about immigration influences treatments separately for two subgroups: those who did not vote for FN in the past (columns (1)-(3)) and those who did (columns (4)-(6)). Panel A of Table 5 presents the direct effects of the treatment for respondents with correct priors and the difference between the effects of treatments for the respondents with incorrect vs. correct priors. Panel B presents the direct effect for incorrect priors (i.e., the sum of Panel A's coefficients for treatments and interaction terms). In Columns (2), (3), (5), and (6), in addition to the baseline set of covariates used in columns (1) and (4), we control for the post-experiment policy impressions. Irrespective of specification, we find striking contrast in the reactions to treatments among partisans and non-partisans of FN depending on their prior knowledge.

First, let us consider non-partisans (columns (1)-(3) of Table 5). The entire effect of every treatment comes from those who hold wrong priors about unemployment among migrants. The effects of all three treatments on non-partisans with correct priors are

[20]Note that even those who hold incorrect prior beliefs do respond to Facts and Fact-Check by updating their posterior beliefs toward the truth. This effect is strong, although it is weaker than for those who hold correct prior beliefs. Respondents with incorrect priors were 30 percentage points more likely to have correct posterior about participation rate among immigrants after the Facts treatment and 16 percentage points after Fact-Checking treatment. The respective figures for the share of men among refugees are 41 and 24 percentage points. We report these results in Table A6 in the online appendix.

precisely-estimated zeros. In contrast, the effects of treatments on non-partisans with incorrect priors is very large: their voting intentions increase by 17, 16, and 7 percentage points in Alt-Facts, Fact-Checking, and Facts treatments, respectively. These results are consistent with the salience explanation developed in the previous section, which implies that the topic becomes particularly salient when the truth is far from the prior (e.g., Bordalo et al., 2012, 2013).

Second, let us consider the partisans, i.e., respondents who have voted for FN in the past (columns (4)-(6) of Table 5). Their reaction to the treatment is completely different. Partisans react to official information in both Facts and Fact Check treatments by voting significantly *more* for MLP if they hold *correct* priors. There is a 13.5 percentage point difference between the Facts group and the Control group and a 12 percentage points difference between the Fact Check group and the Control group among partisans with correct priors. In contrast, the partisans with incorrect priors were not affected by any of the treatments. Naturally, the average intention to vote for MLP among partisans is much higher than among non-partisans: 77% vs. 13% in the control group, as reported in the bottom row of Panel A of the Table. Importantly, the average support for MLP among partisans with the correct prior is 72%, and 83% among the partisans with the incorrect prior. Thus, the share of people who potentially could be persuaded to vote for MLP in this group is very small, as the vast majority is already convinced.

Why are partisans affected by official information if they have the correct priors? One possibility is that Facts and Fact Check treatments raise the salience of counter-MLP actions by the establishment; so these MLP supporters decide to proactively fight these actions. They understand that the official data are correct. This is exactly why they are concerned that the dissemination of official data may dissuade other potential MLP voters. Therefore, they decide to increase their support for MLP to countervail the factually correct information that effectively undermines MLP's case.

These findings are consistent with the analysis of participants' trust in the official institutions (the source of factual information in the Facts treatment). Table 6 presents the results broken down by prior knowledge and partisanship. Columns (1) and (2) report the results for the non-partisans, (3)-(4) — for the partisans. We find a significant differ-

ence in the effect of the facts treatment on distrust in institutions between those who had a correct prior, and therefore, for whom trust in institutions was significantly boosted by having their prior confirmed by the official information and those, who had an incorrect prior, whose distrust in official sources was confirmed after they have learned that official position on facts disagrees with their own prior. In particular, distrust in institutions is 8 percentage points lower after facts treatment than in control group for those non-partisans whose prior was correct. We also find a similar effect of fact checking treatment on mistrust in institutions, but it is precisely estimated only for trust in all institutions (column 2) and is imprecise for the institutions which are the sources of facts in the experiment (column (1)). Columns (3) and (4) show that the partisans with either correct or incorrect priors do not update their (low) trust in official institutions when exposed to facts.

5 Additional tests and robustness

In the analysis above we proxied the support for Marine Le Pen by the self-reported voting intentions. In this section we check the validity of this measure. We also explore the heterogeneity in treatment effects.

5.1 Evidence from the dictator games

In order to check whether the self-reported voting intentions are not a cheap talk, we administered two dictator games involving real payoffs to survey participants (see section 3.5.1). In the first game, every respondent was given a 10 percent chance to win 10 euros. He/she was *ex ante* requested to decide which part of this prize he/she would share with another, randomly selected respondent. The second game was exactly the same except that respondents were told that they are sharing the money with another participant randomly selected among those who reported that they were likely or very likely to vote for MLP in the upcoming election. 42% of respondents did not share any money with a random counterpart; 50% of respondents did not share money with a MLP supporter;

18.5% of respondents decided to share a higher amount with a potential MLP voter than with a random participant; 13.2% of respondents chose to give some money to a random participant and chose to give nothing to a MLP supporter.

In Table 7, we examine how donations in these dictator games are related to self-reported voting intentions and whether outcomes of dictator games were affected by the treatments. In column (1) we show that the amount given to a MLP supporter is highly correlated with self-reported willingness to vote for MLP. Column (2) shows that the individuals reporting intention to vote for MLP are less likely to make a donation to a random participant and are more likely to give to another MLP supporter. As we express donations in euros (with the potential range from 0 to 10), a one euro increase in a donation to a MLP supporter, conditional on the amount donated to a random counterpart, is associated with additional 3.7 percentage points in the probability to vote for MLP. In column (3), we show that those who shared monetary payoffs with a random participant, but chose not give any money to a MLP supporter are 16 percentage points less likely to be supporters of MLP themselves. Column (4) presents the results for those who share non-zero amount with a random counterpart; this column those who prefer to give to MLP supporters are 16 percentage points more likely to vote for MLP. These results suggest that the self-reported voting intentions do reflect the real preferences of respondents.

The rest of the Table examines whether there are differences in the outcome of dictator games across treatments. In column (5), we show that there is no significant effect of treatments on the amounts donated to the MLP supporters in the second dictator game. Columns (6) and (7), however, show that people who donated a non-zero amount to a random counterpart and gave strictly zero a MLP supporter are significantly less frequent in Alt-Facts group. In column (6) we use the whole sample and in column (7) we use the subsample of people who donated to another anonymous random respondent. Among those who gave non-zero amounts in the first dictator game, those who received Alt-Facts treatment are 6 percentage points more likely to give to MLP supporters as well. The effects of other treatments on this outcome are imprecisely estimated, but have the same sign as the effects of treatments on voting intentions.

Given that the overall rate of donations is rather small, and therefore, one would need

very large samples to detect significant differences across treatments, we take this evidence as supportive of the conclusion that we can rely on voting intentions as an informative measure of political preferences. Another reason to use the survey question rather than the approach using the dictator game is that donations are on average low, even in the first dictator game where 41.7% of the participants transferred 0, compared to the standard results in the literature (Fowler and Kam, 2007; Rand et al., 2009). It is worth noting that there are two differences between our setup and the conventional dictator games. First, we stated that there was one chance out of ten that participants would actually receive the amount and have the transfer implemented. Second, the amounts were expressed in Qualtrics points rather than euros, yielding higher nominal amounts.[21] Both differences might account for the non standard behavior of our subjects in the dictator game.

5.2 Evidence from the list experiments

We use the results of the list experiment (see section 3.5.1) as yet another check of the validity of self-reported voting intentions. Table 8 reports the results. In the first column, we regress on the whole sample the response about the total number of supported politicians from the list on a dummy indicating whether the list contained the name of Marine Le Pen. The estimated coefficient on this dummy equals 0.44. This implies that in our sample about 44% of the respondents support MLP. This is slightly higher than 39% share of those who self reported their intention to vote for MLP. This difference may mean that about 5% of voters do support MLP but are not willing to openly declare intentions to vote for her. However, this difference may also be due to the difference in the formulations of the list experiment's question ("overall support of the politician's program") and the voting intention question ("intention to vote").

In columns (2) and (3) of Table 8 we check whether support for Marine Le Pen inferred from the list experiment is higher among those who declared intention to vote for her. In particular, we repeat the exercise presented in column (1) separately for the subsample

[21] 10 euros is equivalent to 2500 Qualtrics points. These points are used also to reward the participation in the survey and can be used as currency with the Qualtrics partners.

of those who did and who did not declare intention to vote for MLP (columns (2) and (3), respectively). As expected, the inferred level of support for MLP is much higher among those who self-report their support of her: 91.5% vs. 12%. To show that this difference is statistically significant we use the whole sample and add the voting intention dummy and its interaction with the dummy for the list with MLP to the set of covariates (in column (4)). The coefficient at the interaction term is highly statistically significant. The confidence interval for the inferred support for MLP among those who self-declare the intention to vote for her is $[0.79; 1.04]$ and therefore includes 1. Thus, we cannot reject the hypothesis that everyone who reported intention to vote for MLP supported her in the list experiment.

Finally, in the last column of Table 8, we report the estimates of the inferred support for MLP in each of the treatment groups and in the control group. The sample size is not large enough for the differences in the inferred support for MLP to be significantly different across treatments, but the differences in magnitudes of point estimates are consistent with the effects of the treatments on voting intentions. The inferred support for MLP is the lowest in the control group, and is equal to 38%. It is 46% in both Alt-Facts and Fact-Checking groups, and it is 45% in the Facts group. (Formal tests cannot reject equality of any of these numbers.) Overall, the results of the list experiment also suggest that the self-reported voting intentions are rather reliable.

5.3 Heterogeneity

Tables A4 and A5 in the online appendix explore potentially relevant dimensions of heterogeneity of treatment effects on the following main outcomes: voting intentions, distance to truth on the posterior beliefs about the share of men among refugees, distance to truth on the posterior about the share of working among migrants, the dummy for a belief that refugees come for economic reason, and a dummy for disagreement with MLP on immigration policy. Each panel of these Tables presents the coefficients at the interaction terms between each treatment and a particular characteristic from five different regressions. We also present the coefficients estimating direct effects of these characteristics in

the control group, when they matter for interpretation of the results about the treatment heterogeneity.

We have already discussed Panels A and B of Table A4 in the section 4.2.2 above. In Panel C, we show that those individuals who get their news mainly from TV (about 60% of the sample) are more responsive to MLP's arguments when it comes to voting intentions and posteriors on the reasons for refugees to come. In contrast, Panel D shows that Alt-Facts treatment is less effective on those who get their news from internet (20% of the sample). Panel E shows that those who get most of their income from social security and pensions (35% of the sample) are, on average, more inclined to vote for MLP, but their voting intentions are less sensitive to any of the treatments than for the rest of the population. In Panel F, we show that having completed secondary education (62% of the sample) makes people adjust their posteriors more towards the truth after being exposed to official information in facts and fact-checking treatments, but does not affect sensitivity of respondents' voting intentions to treatments.

Panel A of Table A5 shows that individuals with higher income tend to be more sensitive to official information in the Fact-checking and Facts treatment, which makes them less likely to believe that refugees come for economic reason. The rest of the Table A5 shows no heterogeneity of treatments' effects with respect to age, gender, being a second-generation immigrant (we have no first-generation immigrants in the sample), self-reported score on the left-right political axis, or regional-level election results.

6 Concluding remarks

We have carried out an online randomized control experiment to measure the persuasion power of alternative facts and the effectiveness of fact checking to counter their effect.

Our results show that fact checking can correct biases in factual knowledge introduced by politically-charged alternative facts. We focused on a relatively fresh campaign issue — the composition and the impact of the recent influx of refugees from Middle East and North Africa to Europe and facts not widely known or well publicised — such as the share of men among refugees crossing the Mediterranean. This differentiates our study from

the literature that examined more established topics such as weapons of mass destruction, crime and unemployment. Our results may therefore be interpreted as an argument in favor of the "rapid response" of fact checkers before opinions become too entrenched.

We find however that the fact-checking's success in correcting factual knowledge does not translate into an impact on voting intentions. There is no effect of fact-checking on the support for the misleading interpretation of the alternative facts offered by a populist politician — and on the intentions to vote for this politician. This means that the impact of the political campaign messages is not limited to facts and figures; the campaigns' impact is first and foremost is due to its narratives.

Furthermore, providing the facts alone may backfire. When individuals with incorrect priors are provided factual knowledge on immigration, they become more (rather than less) likely to support populist politician's views and to vote for her. This result may be driven by the salience effect. By providing facts on immigration, fact checkers may alert the voters to the importance of the immigration issue and thus shift their support towards the politician whose campaign is centered on the issue.

Taken together, our results imply that providing the correct statistical evidence is not sufficient to correct the effect that dishonest politicians have on voters. When a statistical fact is used in a logical link to reach a conclusion, fact checking would presumably need to question the policy conclusion, using the correct facts, logical links and narratives. This raises an important question about the design of impartial fact-checking institutions as preserving impartiality is much easier for institutions focusing on facts and statistics than for those producing interpretations, conclusions, and narratives.

References

Allcott, H. and Gentzkow, M. (2017). Social media and fake news in the 2016 election. Technical report, National Bureau of Economic Research.

Bénabou, R. and Tirole, J. (2016). Mindful economics: The production, consumption, and value of beliefs. *The Journal of Economic Perspectives*, 30(3):141–164.

Berinsky, A. J. (2015). Rumors and health care reform: experiments in political misinformation. *British Journal of Political Science*, pages 1–22.

Blair, G. and Imai, K. (2012). Statistical analysis of list experiments. *Political Analysis*, pages 47–77.

Bordalo, P., Gennaioli, N., and Shleifer, A. (2012). Salience theory of choice under risk. *Q J Econ*, 127(3):1243–1285.

Bordalo, P., Gennaioli, N., and Shleifer, A. (2013). Salience and consumer choice. *Journal of Political Economy*, 121(5):803–843.

Bursztyn, L., Egorov, G., and Fiorin, S. (2017). From extreme to mainstream: How social norms unravel. Working Paper 23415, National Bureau of Economic Research.

DellaVigna, S. and Kaplan, E. (2006). The fox news effect: Media bias and voting. Technical report, National Bureau of Economic Research.

Edwards, K. and Smith, E. E. (1996). A disconfirmation bias in the evaluation of arguments. *Journal of Personality and Social Psychology*, 71(1):5.

Enikolopov, R., Petrova, M., and Zhuravskaya, E. (2011). Media and political persuasion: Evidence from russia. *The American Economic Review*, 101(7):3253–3285.

Fowler, J. H. and Kam, C. D. (2007). Beyond the self: Social identity, altruism, and political participation. *Journal of Politics*, 69(3):813–827.

Gerber, A. S., Karlan, D., and Bergan, D. (2009). Does the media matter? a field experiment measuring the effect of newspapers on voting behavior and political opinions. *American Economic Journal: Applied Economics*, 1(2):35–52.

Grigorieff, A., Roth, C., and Ubfal, D. (2016). Does information change attitudes towards immigrants? representative evidence from survey experiments.

Hatton, T. J. (2017). Public opinion on immigration in europe: Preference versus salience.

Lord, C. G., Ross, L., and Lepper, M. R. (1979). Biased assimilation and attitude polarization: The effects of prior theories on subsequently considered evidence. *Journal of personality and social psychology*, 37(11):2098.

Mocanu, D., Rossi, L., Zhang, Q., Karsai, M., and Quattrociocchi, W. (2015). Collective attention in the age of (mis) information. *Computers in Human Behavior*, 51:1198–1204.

Nyhan, B. (2010). Why the "death panel" myth wouldn't die: Misinformation in the health care reform debate. *Politics*, 8(1):5.

Nyhan, B., Porter, E., Reifler, J., and Wood, T. (2017). Taking corrections literally but not seriously? the effects of information on factual beliefs and candidate favorability. Mimeo 23415.

Nyhan, B. and Reifler, J. (2015). Does correcting myths about the flu vaccine work? an experimental evaluation of the effect of correcting information. *Vaccine*, 33:459–464.

Rand, D. G., Pfeiffer, T., Dreber, A., Sheketoff, R. W., Wernerfelt, N. C., and Benkler, Y. (2009). Dynamic remodeling of in-group bias during the 2008 presidential election. *Proceedings of the National Academy of Sciences*, 106(15):6187–6191.

Romano, J. P. and Wolf, M. (2005). Exact and approximate stepdown methods for multiple hypothesis testing. *Journal of the American Statistical Association*, 100(469):94–108.

Swire, B., Berinsky, A., Lewandowsky, and Ecker, U. (2017). Processing political misinformation: comprehending the trump phenomenon. *Royal Society Open Science*, 4.

Taber, C. S. and Lodge, M. (2006). Motivated skepticism in the evaluation of political beliefs. *American Journal of Political Science*, 50(3):755–769.

Wood, T. and Porter, E. (2016). The elusive backfire effect: Mass attitudes' steadfast factual adherence. *ssrn WP*.

Figures

FIGURE 1: Voting intentions

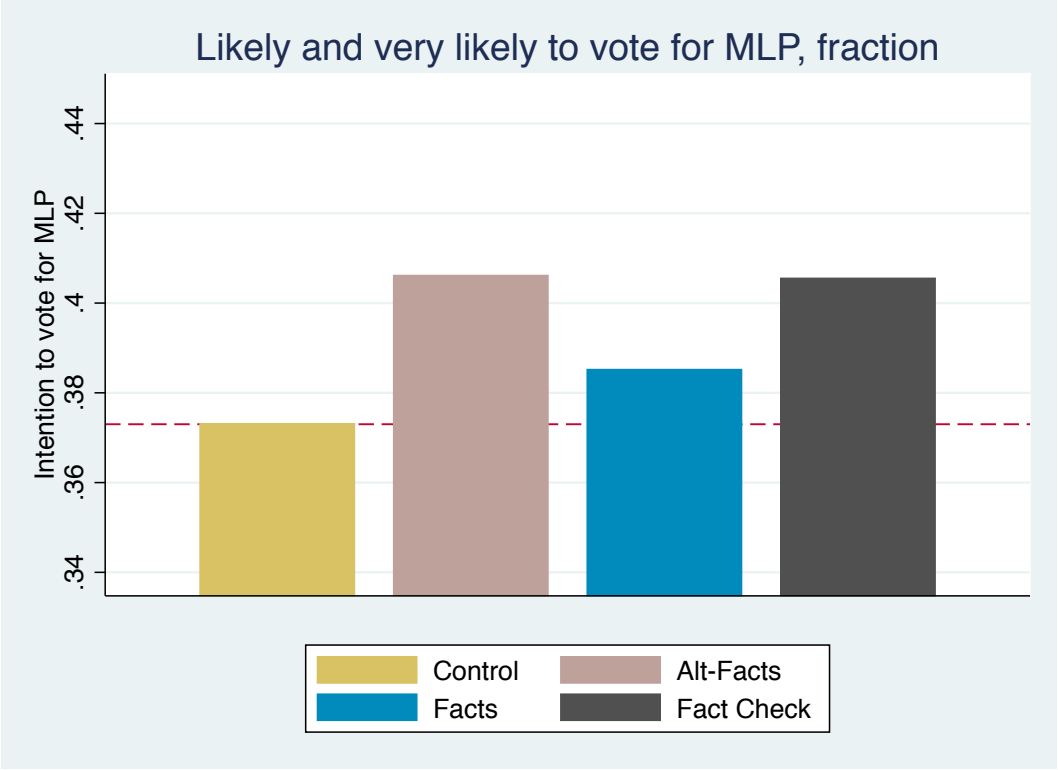


FIGURE 2: Posterior beliefs on proportion of men among migrants

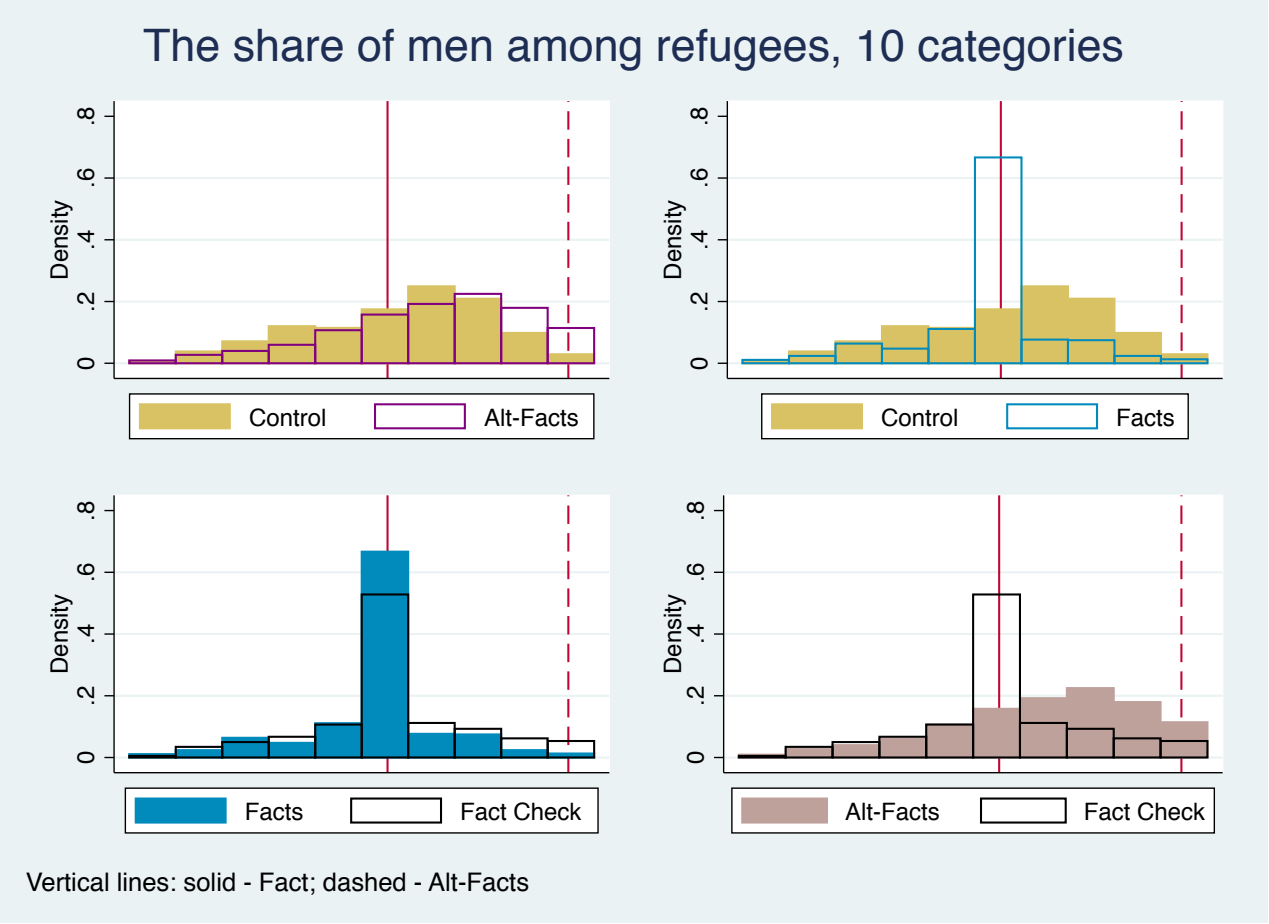


FIGURE 3: Posterior beliefs on the share of working among migrants

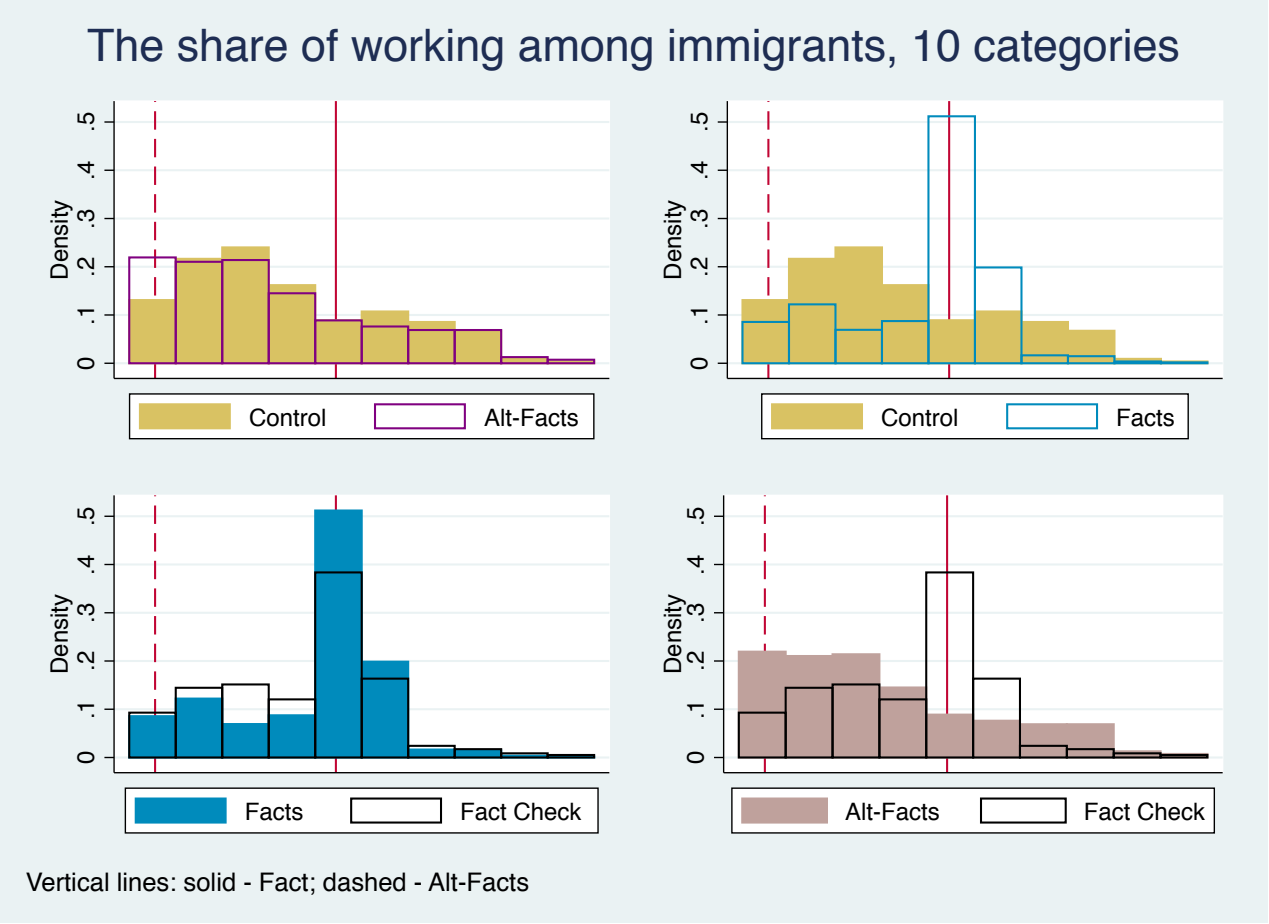


FIGURE 4: Reported reasons for migrants to come

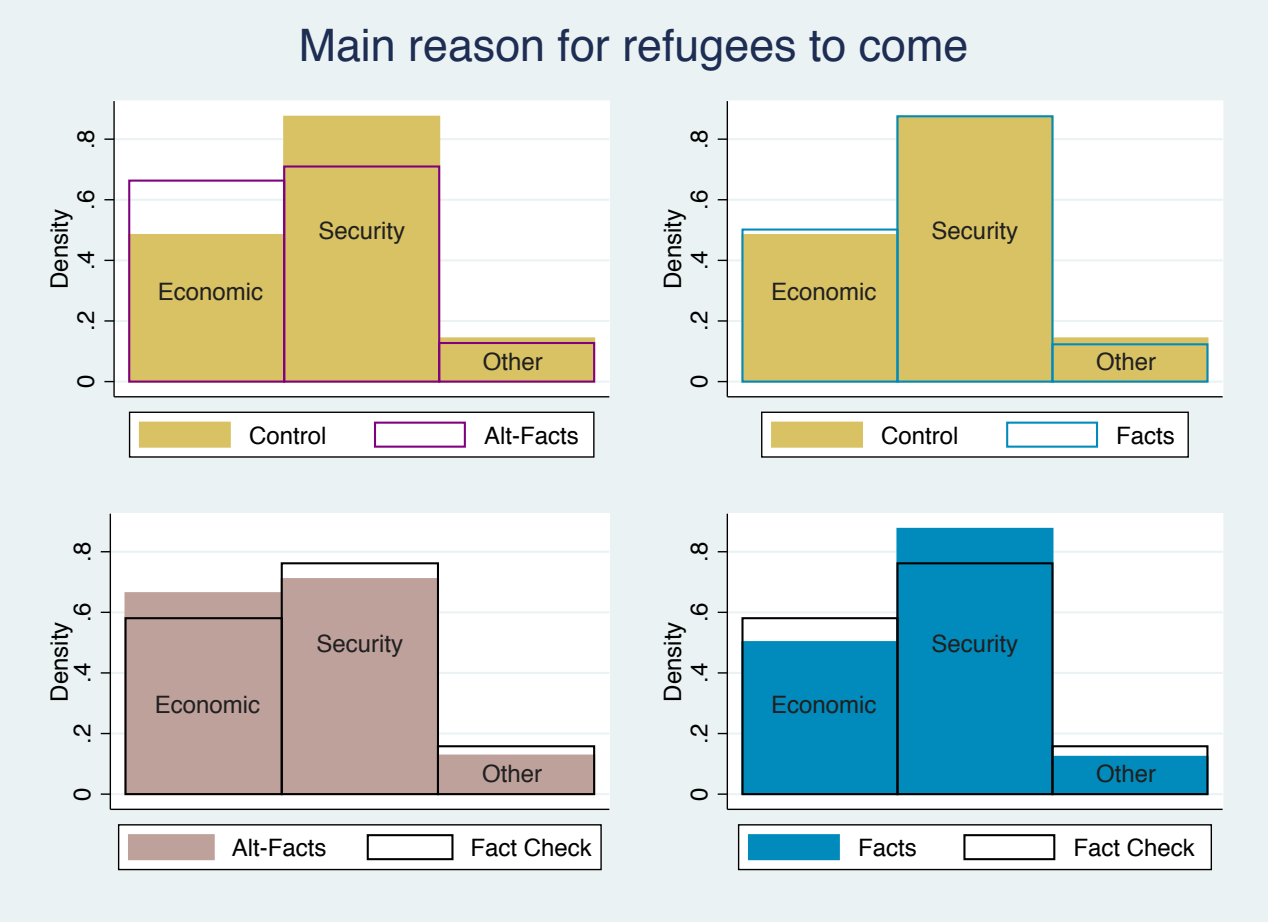
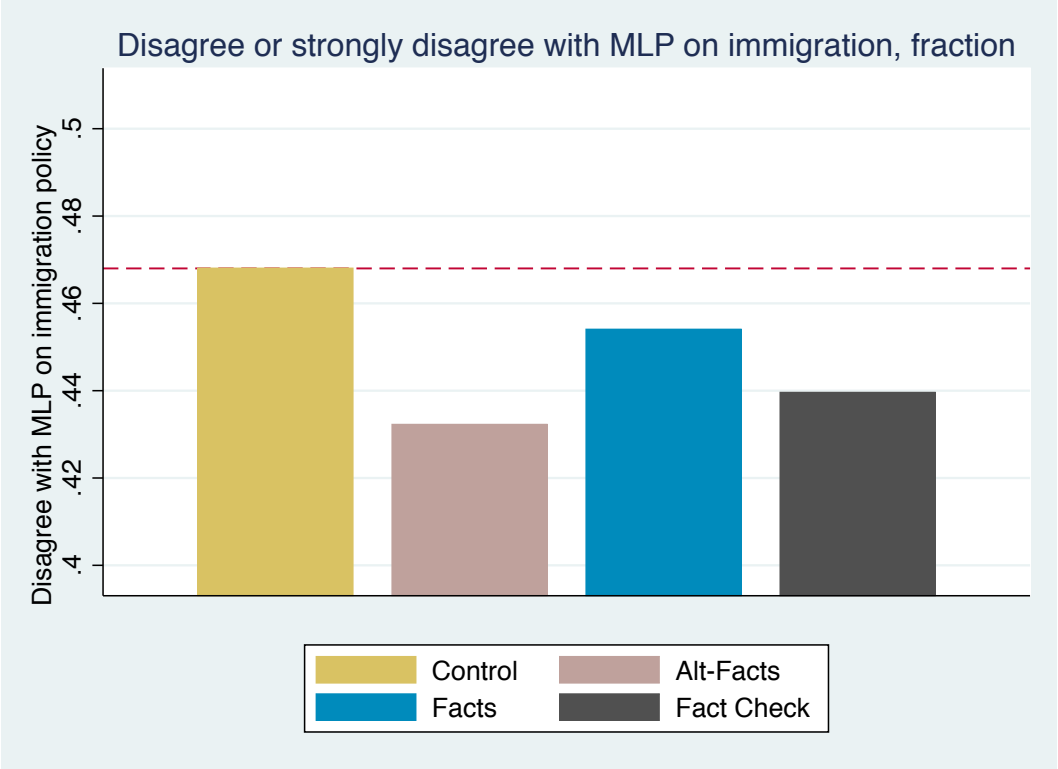


FIGURE 5: Disagreement with MLP on immigration policy



Tables

TABLE 1: Balancing test across randomized groups

	Control Vs Alt-Fact	Control Vs Fact	Control Vs Fact Check	Alt-Fact Vs Fact Check	Alt-Fact Vs Fact Check	Fact Vs Fact Check
Demographics						
Age	0.96	0.99	0.98	0.92	0.16	0.99
Male	0.99	0.99	0.99	0.98	0.98	0.99
Completed secondary educ.	0.99	0.97	0.99	0.98	0.91	0.71
French father	0.99	0.99	0.71	0.98	0.90	0.99
French mother	0.99	0.89	0.99	0.95	0.99	0.96
Have children	0.99	0.99	0.99	0.98	0.98	0.99
Number of children	0.99	0.99	0.96	0.98	0.86	0.98
Married	0.24	0.99	0.38	0.69	0.98	0.76
Single	0.99	0.99	0.99	0.76	0.98	0.98
Economic Status						
Income level	0.99	0.99	0.70	0.98	0.98	0.99
Land owner	0.99	0.99	0.85	0.98	0.98	0.99
Student	0.99	0.99	0.99	0.98	0.98	0.99
Unemployed	0.99	0.99	0.99	0.98	0.98	0.99
Worker	0.99	0.99	0.80	0.98	0.90	0.99
Retired	0.99	0.99	0.67	0.98	0.16	0.72
Home owner	0.99	0.99	0.99	0.98	0.90	0.97
Source of income						
Wage	0.99	0.78	0.02**	0.61	0.00***	0.97
Benefits	0.99	0.99	0.94	0.98	0.98	0.99
Pension	0.99	0.96	0.31	0.80	0.10*	0.99
Media Consumption						
Television	0.99	0.99	0.85	0.98	0.19	0.98
Radio	0.99	0.99	0.99	0.98	0.90	0.99
Internet	0.99	0.99	0.85	0.98	0.91	0.99
Religion						
Catholic	0.99	0.99	0.99	0.98	0.47	0.96
Muslim	0.99	0.99	0.99	0.98	0.91	0.99
No religion	0.99	0.99	0.99	0.98	0.91	0.97
Politics						
Registered to vote	0.99	0.99	0.75	0.98	0.98	0.99
Voted for FN in the past	0.73	0.78	0.70	0.98	0.99	0.99
Voted for MLP in the past	0.99	0.99	0.99	0.98	0.99	0.99
Score on left-right axis	0.77	0.98	0.94	0.98	0.98	0.99
Prior on migr. unemployment	0.99	0.99	0.98	0.98	0.99	0.99
Observations	1,224	1,221	1,257	1,223	1,259	1,256

Note: Standard errors are corrected for heteroscedasticity and multiple hypotheses testing (Romano and Wolf, 2005). p-values for the test of difference in means across groups presented in the table. * $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$.

TABLE 2: Effect of the treatments on the main outcomes

	Will vote for MLP	Distance to truth on %: men-refugees	Distance to truth on %: migrants workings	Correct posterior on %: men-refugees	Correct posterior on %: migrants workings	Reason for refugees: Economic	Disagree with MLP on migrants
Alt-Facts	0.068***	0.308***	0.258***	-0.026	-0.007	0.133***	-0.067***
	(0.022)	(0.070)	(0.069)	(0.021)	(0.016)	(0.027)	(0.024)
Fact Check	0.071***	-0.490***	-0.671***	0.308***	0.252***	0.077***	-0.055**
	(0.022)	(0.070)	(0.070)	(0.025)	(0.022)	(0.027)	(0.023)
Facts	0.046**	-0.835***	-0.982***	0.441***	0.374***	0.024	-0.040*
	(0.021)	(0.068)	(0.071)	(0.025)	(0.023)	(0.027)	(0.024)
Observations	2480	2480	2480	2480	2480	2480	2480
Adjusted R^2	0.387	0.140	0.172	0.191	0.172	0.067	0.318
Mean of DV in control group	0.373	1.651	2.115	0.157	0.080	0.322	0.468
p-val: Alt-Facts=FactCheck	0.883	0.000	0.000	0.000	0.000	0.038	0.631
p-val: Facts=FactCheck	0.246	0.000	0.000	0.000	0.000	0.052	0.521
p-val: Alt-Facts=Facts	0.324	0.000	0.000	0.000	0.000	0.000	0.271
p-val: Alt-Facts+Facts=FactCheck	0.171	0.708	0.605	0.002	0.000	0.035	0.128

Robust standard errors in parentheses.
* p<0.1, ** p<0.05, *** p<0.01

Note: The set of unreported covariates is as follows: gender, age (linearly and as a dummy for each age quota), family status, income (with dummies for each of the 10 income categories), education (with dummies for each of the 9 education levels), regional dummies, religion dummies, a dummy indicating that the respondent is a wage-earner, a dummy for whether the respondent reported having voted for FN in the past.

TABLE 3: Is effect on voting mediated by the effect on knowledge or impressions?

	Will vote for MLP				
	(1)	(2)	(3)	(4)	(5)
Alt-Facts	0.068***	0.048**	0.040**	0.035*	0.028
	(0.022)	(0.022)	(0.020)	(0.020)	(0.020)
Fact Check	0.071***	0.060***	0.048**	0.046**	0.049**
	(0.022)	(0.021)	(0.019)	(0.019)	(0.019)
Facts	0.046**	0.042**	0.029	0.029	0.036*
	(0.021)	(0.021)	(0.020)	(0.020)	(0.020)
Reason for migration economic		0.148***		0.039**	0.033*
		(0.018)		(0.017)	(0.017)
Disagree with MLP			-0.424***	-0.411***	-0.406***
			(0.020)	(0.021)	(0.021)
Posterior on % men-refugees					0.009**
					(0.004)
Posterior on % migrants working					-0.005
					(0.004)
Observations	2480	2480	2480	2480	2480
Adjusted R^2	0.387	0.406	0.514	0.515	0.516

Robust standard errors in parentheses

* p<0.1, ** p<0.05, *** p<0.01

Note: The set of unreported covariates is as follows: gender, age (linearly and as a dummy for each age quota), family status, income (with dummies for each of the 10 income categories), education (with dummies for each of the 9 education levels), regional dummies, religion dummies, a dummy indicating that the respondent is a wage-earner, a dummy for whether the respondent reported having voted for FN in the past.

TABLE 4: Impact of Alt-Facts on the link between facts and impressions

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dep. Var:	% men among refugees		Reason for refugees: economic			Disagree with MLP on migrants		
Sample:	Alt-Facts	Control	Alt-Facts + Control			Alt-Facts + Control		
Model:	First stages		OLS	IV	Reduced form	OLS	IV	Reduced form
Alt-facts			0.089***	0.101***	0.132***	-0.040*	-0.007	-0.067***
			(0.027)	(0.038)	(0.028)	(0.024)	(0.034)	(0.024)
Prior on unemployment of migrants	0.183***	0.231***			0.015			-0.010
	(0.043)	(0.041)			(0.010)			(0.008)
Prior on unemployment of migrants × Alt-Facts					-0.012			-0.010
					(0.013)			(0.012)
Posterior on % men-refugees			0.049***	0.069		-0.014*	-0.048	
			(0.009)	(0.042)		(0.008)	(0.038)	
Posterior on % men-refugees × Alt-Facts			0.016	-0.053		-0.040***	-0.061	
			(0.013)	(0.066)		(0.011)	(0.059)	
Observations	613	611	1224	1224	1224	1224	1224	1224
Adjusted R^2	0.034	0.070	0.121	0.095	0.065	0.347	0.313	0.324
F-stat for excl. instrument 1				22.94			22.94	
F-stat for excl. instrument 2				10.91			10.91	

Robust standard errors in parentheses

* p<0.1, ** p<0.05, *** p<0.01

Note: The set of unreported covariates is as follows: gender, age (linearly and as a dummy for each age quota), family status, income (with dummies for each of the 10 income categories), education (with dummies for each of the 9 education levels), regional dummies, religion dummies, a dummy indicating that the respondent is a wage-earner, a dummy for whether the respondent reported having voted for FN in the past.

TABLE 5: Voting intentions by partisanship and priors

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. var.:	Will vote for MLP			Will vote for MLP		
Sample:	Non-partisans			Partisans		
	Panel A: The effect of treatment on people with correct prior and the difference with those with incorrect prior					
Alt-Facts (for correct prior)	0.018	-0.008	-0.016	0.092	0.084	0.076
	(0.032)	(0.030)	(0.027)	(0.056)	(0.057)	(0.054)
Fact Check (for correct prior)	0.017	0.009	0.009	0.119**	0.113**	0.097*
	(0.032)	(0.031)	(0.026)	(0.053)	(0.053)	(0.050)
Facts (for correct prior)	0.006	0.003	-0.022	0.135**	0.134**	0.108**
	(0.032)	(0.032)	(0.028)	(0.052)	(0.052)	(0.050)
Incorrect prior × Alt-facts	0.153***	0.162***	0.135***	-0.108	-0.107	-0.096
	(0.056)	(0.054)	(0.049)	(0.079)	(0.080)	(0.078)
Incorrect prior × Fact Check	0.141***	0.134**	0.100**	-0.123	-0.121	-0.123
	(0.054)	(0.054)	(0.047)	(0.078)	(0.078)	(0.075)
Incorrect prior × Facts	0.066	0.071	0.096**	-0.163**	-0.166**	-0.135*
	(0.052)	(0.052)	(0.046)	(0.080)	(0.080)	(0.078)
Correct prior	0.062*	0.078**	0.081**	-0.106*	-0.105*	-0.094*
	(0.037)	(0.037)	(0.033)	(0.056)	(0.056)	(0.055)
Reason for migration economic		0.213***	0.061***		0.038	0.011
		(0.023)	(0.022)		(0.028)	(0.028)
Disagree with MLP			-0.402***			-0.379***
			(0.023)			(0.064)
	Panel B: The effect of treatment on people with incorrect prior					
Alt-Facts (for incorrect prior)	0.171***	0.154***	0.118***	-0.016	-0.022	-0.020
	(0.047)	(0.046)	(0.042)	(0.056)	(0.056)	(0.056)
Fact Check (for incorrect prior)	0.158***	0.143***	0.109***	-0.004	-0.007	-0.026
	(0.045)	(0.045)	(0.039)	(0.058)	(0.058)	(0.056)
Facts (for incorrect prior)	0.072*	0.073*	0.074**	-0.028	-0.032	-0.028
	(0.042)	(0.042)	(0.037)	(0.060)	(0.060)	(0.059)
Observations	1638	1638	1638	842	842	842
Adjusted R^2	0.052	0.114	0.318	0.008	0.009	0.071
mean of DV in control group	0.132	0.132	0.132	0.767	0.767	0.767

Robust standard errors in parentheses

* p<0.1, ** p<0.05, *** p<0.01

Note: The set of unreported covariates is as follows: gender, age (linearly and as a dummy for each age quota), family status, income (with dummies for each of the 10 income categories), education (with dummies for each of the 9 education levels), regional dummies, religion dummies, a dummy indicating that the respondent is a wage-earner, a dummy for whether the respondent reported having voted for FN in the past.

TABLE 6: Mistrust in institutions by partisanship and priors

	(1)	(2)	(3)	(4)
Dep. var.:	Average distrust in institutions:		Average distrust in institutions:	
	UN,INSEE	UN,INSEE,OECD,MinEcon	UN,INSEE	UN,INSEE,OECD,MinEcon
Sample:	Non-partisans		Partisans	
	Panel A: The effect of treatment on people with correct prior and the difference with those with incorrect prior			
Alt-Facts (for correct prior)	-0.025	-0.015	-0.004	-0.027
	(0.034)	(0.030)	(0.053)	(0.042)
Fact Check (for correct prior)	-0.050	-0.063**	-0.010	-0.032
	(0.034)	(0.031)	(0.053)	(0.040)
Facts (for correct prior)	-0.078**	-0.082***	-0.042	-0.039
	(0.033)	(0.031)	(0.053)	(0.042)
Incorrect prior × Alt-facts	0.042	0.049	0.099	0.083
	(0.060)	(0.053)	(0.081)	(0.065)
Incorrect prior × Fact Check	0.001	0.040	0.079	0.083
	(0.057)	(0.051)	(0.084)	(0.064)
Incorrect prior × Facts	0.096*	0.113**	0.102	0.075
	(0.057)	(0.051)	(0.084)	(0.065)
Correct prior	-0.046	-0.023	0.004	0.027
	(0.042)	(0.038)	(0.057)	(0.044)
	Panel B: The effect of treatment on people with incorrect prior			
Alt-Facts (for incorrect prior)	0.017	0.034	0.096	0.056
	(0.049)	(0.043)	(0.062)	(0.050)
Fact Check (for incorrect prior)	-0.049	-0.023	0.068	0.050
	(0.046)	(0.041)	(0.065)	(0.049)
Facts for (incorrect prior)	0.018	0.030	0.060	0.036
	(0.046)	(0.041)	(0.066)	(0.051)
Observations	1638	1638	842	842
Adjusted R^2	0.082	0.103	0.013	0.008
mean of DV in control group	0.377	0.505	0.502	0.666

Robust standard errors in parentheses

* p<0.1, ** p<0.05, *** p<0.01

Note: The set of unreported covariates is as follows: gender, age (linearly and as a dummy for each age quota), family status, income (with dummies for each of the 10 income categories), education (with dummies for each of the 9 education levels), regional dummies, religion dummies, a dummy indicating that the respondent is a wage-earner, a dummy for whether the respondent reported having voted for FN in the past.

TABLE 7: Voting intentions are not cheap talk: dictator game outcomes.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dep. Var.:	Will vote MLP	Will vote MLP	Will vote MLP	Will vote MLP	Donation to MLP	Give others, not MLP	Give others, not MLP
Sample:	Full	Full	Full	Donation>0	Full	Full	Donation>0
Alt-Facts					0.012	-0.038**	-0.061*
					(0.092)	(0.019)	(0.031)
Fact Check					-0.049	-0.022	-0.034
					(0.092)	(0.019)	(0.031)
Facts					0.036	-0.011	-0.042
					(0.105)	(0.020)	(0.031)
Donation to MLP	0.010***	0.037***					
	(0.003)	(0.004)					
Donation to anybody		-0.035***			0.676***		
		(0.004)			(0.024)		
Give others, not MLP			-0.159***	-0.162***			
			(0.017)	(0.020)			
Observations	2480	2480	2480	1444	2480	2480	1444
Adjusted R^2	0.386	0.402	0.395	0.351	0.525	0.046	0.072

Robust standard errors in parentheses

* p<0.1, ** p<0.05, *** p<0.01

Note: The set of unreported covariates is as follows: gender, age (linearly and as a dummy for each age quota), family status, income (with dummies for each of the 10 income categories), education (with dummies for each of the 9 education levels), regional dummies, religion dummies, a dummy indicating that the respondent is a wage-earner, a dummy for whether the respondent reported having voted for FN in the past.

TABLE 8: Voting intentions and the results of the list experiment

	(1)	(2)	(3)	(4)	(5)
Dep. Var.:	List number	List number	List number	List number	List number
Sample:	Full	Will vote for MLP: Yes	Will vote for MLP: No	Full	Full
List with MLP	0.438***	0.915***	0.122**		
	(0.042)	(0.061)	(0.055)		
Will vote MLP				-0.698***	
				(0.048)	
Will vote MLP × List with MLP				0.915***	
				(0.061)	
List with MLP × Control					0.380***
					(0.070)
List with MLP × Alt-facts					0.457***
					(0.069)
List with MLP × Fact Check					0.464***
					(0.064)
List with MLP × Facts					0.447***
					(0.070)
Observations	2480	974	1506	2480	2480
Adjusted R^2	0.041	0.187	0.003	0.083	0.040

Robust standard errors in parentheses. The only unreported covariate is a constant.

* p<0.1, ** p<0.05, *** p<0.01

Online Appendix

Appendix Tables

TABLE A1: **Summary statistics**

Samle:	Full sample				Control	Alt-Fact	Fact	Fact Check
	Mean	SD	Min	Max	Mean	Mean	Mean	Mean
Outcome variables								
Will vote MLP	0.39	0.49	0	1	0.37	0.41	0.39	0.41
Disagree with MLP on immigration	0.45	0.50	0	1	0.47	0.43	0.45	0.44
Reason for refugees: Economic	0.37	0.48	0	1	0.32	0.44	0.33	0.39
Dictator game: Donation to anybody	1.82	2.56	0	10	1.82	1.67	1.96	1.80
Dictator game: Donation to MLP	1.45	2.41	0	10	1.50	1.35	1.58	1.38
Give others, not MLP	0.13	0.34	0	1	0.14	0.11	0.14	0.13
Correct posterior on % men-refuges	0.35	0.48	0	1	0.16	0.14	0.60	0.48
Correct posterior on % migrants working	0.24	0.43	0	1	0.08	0.08	0.46	0.35
Correct posterior on French refugees in WWII	0.32	0.47	0	1	0.26	0.25	0.37	0.41
Trust in INSEE	0.68	0.47	0	1	0.65	0.67	0.70	0.69
Trust in UN	0.51	0.50	0	1	0.50	0.47	0.53	0.51
Trust in Ministry of Economy	0.29	0.46	0	1	0.27	0.28	0.32	0.31
Trust in the OCDE	0.34	0.47	0	1	0.32	0.31	0.36	0.37
Demographics								
Age	49.19	14.83	19	82	50.07	15.25	18	77
Male	0.49	0.50	0	1	0.48	0.49	0.47	0.50
Complete secondary education	0.62	0.48	0	1	0.61	0.63	0.65	0.60
French father	0.91	0.28	0	1	0.90	0.91	0.92	0.93
French mother	0.93	0.26	0	1	0.92	0.92	0.95	0.92
Children	0.70	0.46	0	1	0.70	0.68	0.70	0.71
Num children	2.12	0.94	1	5	2.10	2.08	2.10	2.19
Married	0.45	0.50	0	1	0.41	0.48	0.43	0.48
Single	0.21	0.40	0	1	0.21	0.18	0.23	0.20
Economic Status								
Land owner	0.50	0.50	0	1	0.48	0.50	0.51	0.53
Student	0.04	0.20	0	1	0.04	0.05	0.03	0.04
Unemployed	0.08	0.28	0	1	0.08	0.08	0.09	0.08
Worker	0.51	0.50	0	1	0.53	0.52	0.51	0.48
Retired	0.27	0.44	0	1	0.26	0.24	0.26	0.31
Home	0.05	0.23	0	1	0.05	0.06	0.06	0.04
Income	4.91	2.40	1	10	4.76	4.95	4.91	5.03
Source of income								
Wage	0.59	0.49	0	1	0.62	0.63	0.57	0.53
Benefits	0.07	0.25	0	1	0.06	0.06	0.08	0.08
Pension	0.28	0.45	0	1	0.26	0.25	0.29	0.32
Main news source								
Television	0.61	0.49	0	1	0.60	0.58	0.61	0.65
Radio	0.10	0.30	0	1	0.09	0.11	0.10	0.09
Internet	0.22	0.41	0	1	0.24	0.23	0.21	0.20
Religion								
Catholic	0.57	0.50	0	1	0.57	0.54	0.56	0.60
Muslim	0.02	0.14	0	1	0.02	0.03	0.02	0.02
No religion	0.37	0.48	0	1	0.37	0.38	0.38	0.34
Politics								
Registered to vote	0.95	0.22	0	1	0.96	0.94	0.95	0.94
Voted in the past by FN	0.34	0.47	0	1	0.38	0.33	0.33	0.33
Voted MLP last presidential	0.22	0.41	0	1	0.23	0.22	0.20	0.22
Score on left-right axis	0.46	2.87	-5	5	0.65	0.34	0.43	0.42
Correct prior on migr. unemployment	0.27	0.44	0	1	0.28	0.29	0.26	0.26
Observations	2480	2480	2480	2480	611	613	610	646

TABLE A2: Effect of the treatments on knowledge about French refugees in WWII

	(1)	(2)
	The share of refugees among French population in WWII:	
	distance to truth	correct answer
Alt-Facts	0.060	-0.022
	(0.088)	(0.025)
Fact Check	-0.099	0.133***
	(0.089)	(0.026)
Facts	0.034	0.103***
	(0.093)	(0.027)
Observations	2480	2480
Adjusted R^2	0.019	0.049
mean_DV_incontrol	1.589	0.264

Robust standard errors in parentheses
* p<0.1, ** p<0.05, *** p<0.01

Note: The set of unreported covariates is as follows: gender, age (linearly and as a dummy for each age quota), family status, income (with dummies for each of the 10 income categories), education (with dummies for each of the 9 education levels), regional dummies, religion dummies, a dummy indicating that the respondent is a wage-earner, a dummy for whether the respondent reported having voted for FN in the past.

TABLE A3: The relationship between priors and posteriors

	(1)	(2)	(3)	(4)
	Posteriors on:			
	unemployment among migrants		share of migrants working	
Sample:	Alt-Facts	Control	Alt-Facts	Control
Prior on unemployment among migrants	0.009*	0.016***	-0.044	-0.081*
	(0.006)	(0.005)	(0.049)	(0.046)
Observations	613	611	613	611
Adjusted R^2	0.093	0.143	0.087	0.130

Robust standard errors in parentheses
* p<0.1, ** p<0.05, *** p<0.01

Note: The set of unreported covariates is as follows: gender, age (linearly and as a dummy for each age quota), family status, income (with dummies for each of the 10 income categories), education (with dummies for each of the 9 education levels), regional dummies, religion dummies, a dummy indicating that the respondent is a wage-earner, a dummy for whether the respondent reported having voted for FN in the past.

TABLE A4: Heterogeneity

	(1)	(2)	(3)	(4)	(5)
	Will vote for MLP	Distance to truth on %: men-refugees	migrants working	Reason for refugees: economic	Disagree with MLP on migrants
			Panel A: Priors		
Incorrect prior × Alt-facts	0.053	0.199	0.087	-0.040	-0.018
	(0.046)	(0.139)	(0.141)	(0.056)	(0.049)
Incorrect prior × Fact Check	0.044	0.378***	0.529***	0.008	-0.065
	(0.045)	(0.140)	(0.142)	(0.055)	(0.047)
Incorrect prior × Facts	-0.021	0.146	0.346**	0.009	0.075
	(0.044)	(0.134)	(0.142)	(0.055)	(0.048)
Observations	2480	2480	2480	2480	2480
Adjusted R^2	0.387	0.141	0.177	0.068	0.321
			Panel B: Partisanship		
Voted for FN in the past × Alt-facts	-0.033	0.044	-0.177	0.093	0.057
	(0.047)	(0.145)	(0.142)	(0.058)	(0.044)
Voted for FN in the past × Fact Check	-0.014	0.128	0.075	0.089	0.004
	(0.046)	(0.149)	(0.151)	(0.057)	(0.042)
Voted for FN in the past × Facts	0.031	-0.043	0.214	0.042	-0.011
	(0.046)	(0.146)	(0.153)	(0.058)	(0.043)
Observations	2480	2480	2480	2480	2480
Adjusted R^2	0.386	0.139	0.174	0.067	0.318
			Panel C: News from TV		
News from TV × Alt-facts	0.085*	0.011	-0.020	0.124**	-0.060
	(0.045)	(0.143)	(0.142)	(0.056)	(0.048)
News from TV × Fact Check	0.022	-0.180	-0.010	0.156***	-0.038
	(0.045)	(0.146)	(0.146)	(0.055)	(0.048)
News from TV × Facts	0.049	-0.110	0.044	0.038	0.022
	(0.044)	(0.140)	(0.148)	(0.056)	(0.049)
News from TV	-0.008	0.062	-0.069	-0.044	-0.053
	(0.032)	(0.095)	(0.097)	(0.039)	(0.034)
Observations	2415	2415	2415	2415	2415
Adjusted R^2	0.388	0.140	0.169	0.071	0.327
			Panel D: News from internet		
News from internet × Alt-facts	-0.128**	0.024	-0.224	-0.092	0.077
	(0.051)	(0.162)	(0.160)	(0.064)	(0.054)
News from internet × Fact Check	-0.053	0.413**	-0.060	-0.080	0.053
	(0.053)	(0.172)	(0.167)	(0.063)	(0.054)
News from internet × Facts	-0.041	0.099	-0.126	0.029	0.032
	(0.051)	(0.160)	(0.173)	(0.066)	(0.055)
News from internet	0.043	-0.145	0.161	0.016	-0.009
	(0.035)	(0.105)	(0.107)	(0.045)	(0.036)
Observations	2415	2415	2415	2415	2415
Adjusted R^2	0.388	0.141	0.169	0.068	0.322
			Panel E: Social security recipient		
Income from soc. security × Alt-facts	-0.109**	-0.277*	-0.147	-0.048	0.000
	(0.048)	(0.151)	(0.145)	(0.059)	(0.052)
Income from soc. security × Fact Check	-0.082*	-0.236	-0.154	-0.051	-0.062
	(0.046)	(0.146)	(0.144)	(0.056)	(0.050)
Income from soc. security × Facts	-0.089*	-0.266*	-0.161	0.003	0.004
	(0.046)	(0.143)	(0.147)	(0.057)	(0.051)
Income from soc. security	0.129***	0.288**	0.221	0.069	0.015
	(0.046)	(0.146)	(0.145)	(0.056)	(0.050)
Observations	2480	2480	2480	2480	2480
Adjusted R^2	0.388	0.140	0.172	0.066	0.318
			Panel F: Secondary education		
Secondary education × Alt-facts	0.022	-0.089	0.002	-0.021	-0.029
	(0.047)	(0.143)	(0.141)	(0.056)	(0.048)
Secondary education × Fact Check	0.037	-0.348**	-0.131	-0.061	0.002
	(0.046)	(0.143)	(0.144)	(0.055)	(0.047)
Secondary education × Facts	-0.014	-0.404***	-0.325**	-0.085	-0.003
	(0.046)	(0.142)	(0.151)	(0.056)	(0.049)
Observations	2480	2480	2480	2480	2480
Adjusted R^2	0.386	0.143	0.173	0.067	0.318

Robust standard errors in parentheses.

Baseline set of controls and the direct effects of treatments and of the variable with respect to which we study heterogeneity are included.

* p<0.1, ** p<0.05, *** p<0.01

TABLE A5: Heterogeneity, continued

	(1) Will vote for MLP	(2) Distance to truth on %: men-refugees	(3) Distance to truth on %: migrants working	(4) Reason for refugees: economic	(5) Disagree with MLP on migrants
Panel A: Income					
Income × Alt-facts	0.003	0.006	-0.008	-0.012	-0.004
	(0.009)	(0.029)	(0.030)	(0.011)	(0.010)
Income × Fact Check	0.003	-0.035	-0.080***	-0.020*	0.004
	(0.009)	(0.028)	(0.028)	(0.011)	(0.010)
Income × Facts	0.000	-0.037	-0.028	-0.028**	0.003
	(0.009)	(0.028)	(0.030)	(0.011)	(0.010)
Observations	2480	2480	2480	2480	2480
Adjusted R^2	0.386	0.140	0.174	0.068	0.318
Panel B: Age					
Age × Alt-facts	-0.001	-0.007	-0.005	-0.004**	-0.002
	(0.002)	(0.005)	(0.004)	(0.002)	(0.002)
Age × Fact Check	-0.002	-0.009*	-0.004	-0.005***	0.000
	(0.002)	(0.005)	(0.005)	(0.002)	(0.002)
Age × Facts	-0.001	-0.001	0.001	-0.002	-0.001
	(0.001)	(0.004)	(0.005)	(0.002)	(0.002)
Observations	2480	2480	2480	2480	2480
Adjusted R^2	0.387	0.141	0.172	0.069	0.318
Panel C: Gender					
Male × Alt-facts	0.018	-0.282**	-0.003	-0.021	0.032
	(0.044)	(0.138)	(0.138)	(0.054)	(0.047)
Male × Fact Check	-0.005	-0.009	-0.066	-0.046	0.053
	(0.043)	(0.137)	(0.140)	(0.053)	(0.046)
Male × Facts	-0.009	0.050	0.294**	0.025	0.035
	(0.043)	(0.133)	(0.140)	(0.053)	(0.047)
Observations	2480	2480	2480	2480	2480
Adjusted R^2	0.386	0.141	0.174	0.066	0.318
Panel D: Parents born outside France					
Immigrant parents × Alt-facts	-0.097	0.384*	-0.037	-0.004	0.033
	(0.065)	(0.207)	(0.208)	(0.076)	(0.066)
Immigrant parents × Fact Check	-0.092	0.107	-0.177	-0.044	0.110
	(0.068)	(0.206)	(0.197)	(0.077)	(0.068)
Immigrant parents × Facts	0.007	0.310	-0.044	0.099	-0.059
	(0.070)	(0.205)	(0.226)	(0.084)	(0.080)
Observations	2480	2480	2480	2480	2480
Adjusted R^2	0.387	0.140	0.172	0.068	0.319
Panel E: Political orientation					
Score on left-right axis × Alt-facts	0.012	0.016	0.000	0.028***	-0.007
	(0.007)	(0.025)	(0.024)	(0.009)	(0.007)
Score on left-right axis × Fact Check	0.004	-0.012	0.021	0.022**	-0.008
	(0.007)	(0.024)	(0.024)	(0.009)	(0.007)
Score on left-right axis × Facts	0.012*	-0.027	0.001	0.006	-0.009
	(0.007)	(0.023)	(0.025)	(0.009)	(0.007)
Score on left-right axis	0.026***	0.016	0.007	0.018**	-0.038***
	(0.005)	(0.017)	(0.017)	(0.007)	(0.005)
Observations	2480	2480	2480	2480	2480
Adjusted R^2	0.416	0.140	0.172	0.098	0.367
Panel F: Regional-level election results					
Reg. vote for MLP, 2nd round × Alt-facts	0.006	0.008	-0.028	0.004	-0.003
	(0.006)	(0.019)	(0.019)	(0.007)	(0.007)
Reg. vote for MLP, 2nd round × Fact Check	0.003	0.033*	-0.000	0.008	0.003
	(0.006)	(0.018)	(0.018)	(0.007)	(0.006)
Reg. vote for MLP, 2nd round × Facts	0.004	0.015	-0.005	0.002	0.004
	(0.006)	(0.021)	(0.023)	(0.008)	(0.007)
Reg. vote for MLP, 2nd round	-0.004	0.006	0.018	-0.000	-0.005
	(0.007)	(0.020)	(0.021)	(0.008)	(0.007)
Observations	2480	2480	2480	2480	2480
Adjusted R^2	0.386	0.140	0.172	0.066	0.318

Robust standard errors in parentheses

Baseline set of controls and the direct effects of treatments and of the variable with respect to which we study heterogeneity are included.

* p<0.1, ** p<0.05, *** p<0.01

TABLE A6: No backfiring on factual knowledge

	(1)	(2)	(3)
	Correct on the posterior on:		
	% men-refugees	% migrants working	% French refugees in WWII
Alt-Facts	-0.048	-0.024	-0.002
	(0.033)	(0.027)	(0.036)
Fact Check	0.243***	0.162***	0.117***
	(0.040)	(0.034)	(0.039)
Facts	0.414***	0.301***	0.151***
	(0.040)	(0.037)	(0.040)
Correct prior × Alt-facts	0.036	0.028	-0.037
	(0.042)	(0.033)	(0.049)
Correct prior × Fact Check	0.105**	0.149***	0.025
	(0.050)	(0.043)	(0.052)
Correct prior × Facts	0.045	0.122***	-0.080
	(0.050)	(0.047)	(0.053)
Observations	2480	2480	2480
Adjusted R^2	0.192	0.177	0.053

Robust standard errors in parentheses
* p<0.1, ** p<0.05, *** p<0.01

Note: The set of unreported covariates is as follows: gender, age (linearly and as a dummy for each age quota), family status, income (with dummies for each of the 10 income categories), education (with dummies for each of the 9 education levels), regional dummies, religion dummies, a dummy indicating that the respondent is a wage-earner, a dummy for whether the respondent reported having voted for FN in the past.

Appendix Figures

FIGURE A1: 5 regions from which the sample was drawn

FIGURE A2: Voting for Marine Le Pen, first round of Presidential elections 2017

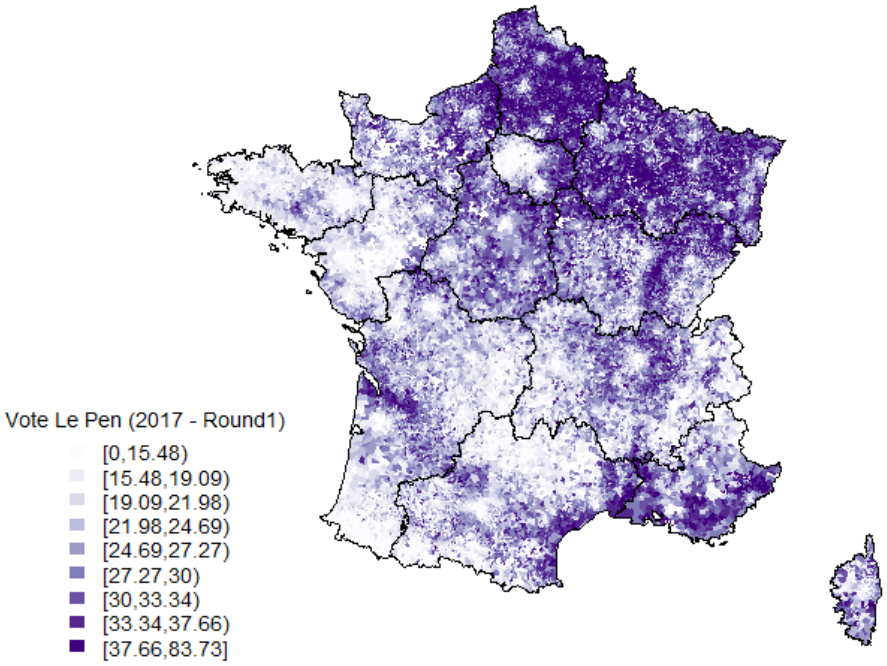
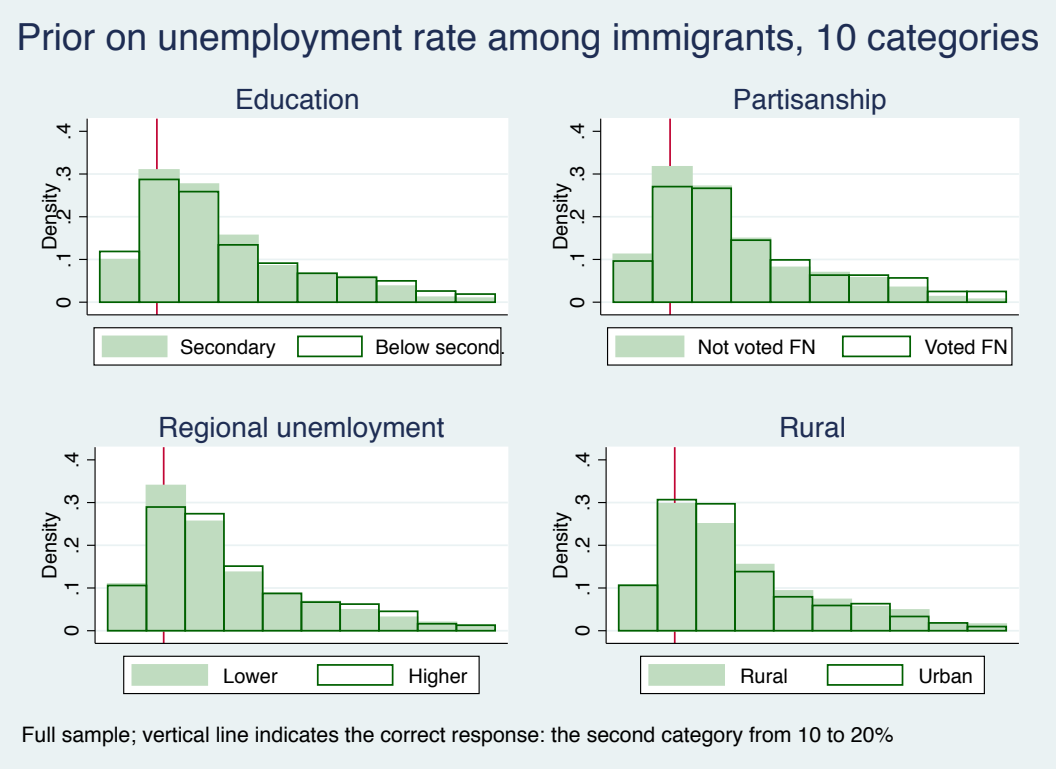
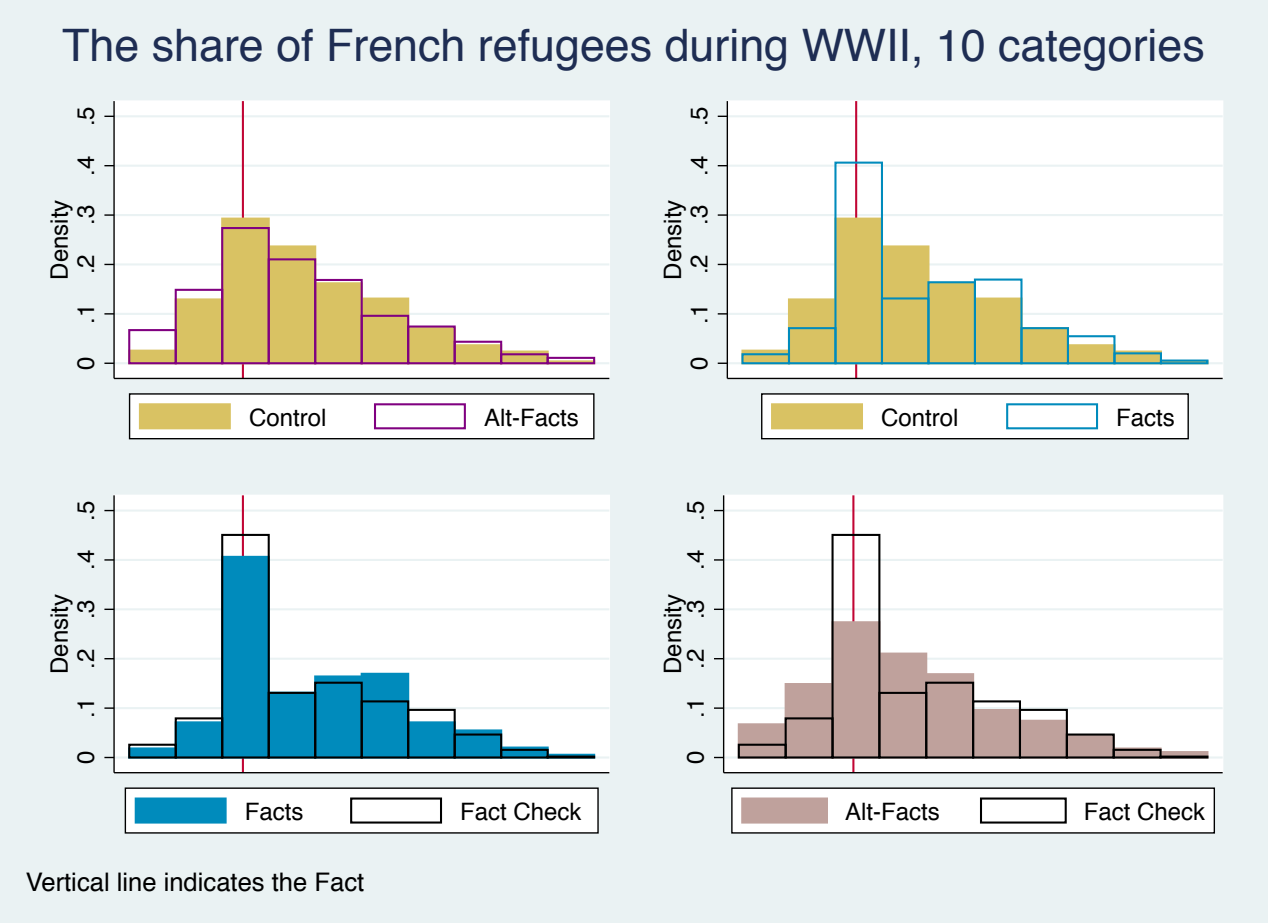


FIGURE A3: Prior beliefs about unemployment among immigrant population



Full sample; vertical line indicates the correct response: the second category from 10 to 20%

FIGURE A4: Posterior beliefs on the share of French refugees during WWII



The text of the treatments (English translation)

Treatment: Alt-Facts

You will read several statements by Marine Le Pen about migrants: their reasons for coming and the impact of migrants on French working and retired population; please read them carefully.

Screen 1

Reasons to come: the National Front, in its program, promises a drastic reduction of the number of asylum seekers allowed to stay in France. This follows a number of statements by Marine Le Pen about migrants and refugees:

8/9/2015: "A very small minority of them are really political refugees (...) I have seen the pictures of illegal immigrants coming down, who were brought to Germany, to Hungary, etc... Well, on these pictures there are 99% of men (...). Men who leave their country leaving their families behind, it is not to flee persecution but of course for financial reasons. Let's stop telling stories. We are facing an economic migration, these migrants will settle."

15/09/2015: "Everyone of us has good reasons to flee the war, but there are also some who fight. Imagine during the Second World War, there were surely many French, believe me, who had good reasons to flee the Germans; and yet, they went to fight against the Germans."

Screen 2

Pensions and work: in the program of the Front National, immigration is presented as being used by big firms to push wages down. This follows a number of statements by Marine Le Pen relative to work and retirement benefits going to refugees:

8/12/2016: "Without mentioning the policies that allow people to obtain a minimum pension under the single condition of coming to France and being above 65, i.e., without having ever worked or paid social contributions in France; and we hand out 750 euros per person, 1500 euros for a couple (...) close to you there are farmers who live with 300 or 400 euros."

27/11/2013: "5% of the foreigners who come to France have a work contract. This means that there is 95% who come to France who are taken care of by our nation (...). There are 95% of people who settle in France who don't work, either because of their age, either because they cannot as there is no work in France."

08/12/2016: "But they [the immigrant population] do not work. They do not work. There are seven million unemployed in our country. How could they work? They do not work, these lies have to stop."

Treatment: Facts

You will read below several numbers and statistics about migrants, related to their reasons to come and their impact on French working and retired population; please read them carefully.

Screen 1

Reasons to come

According to the UNHCR, among the migrants crossing the Mediterranean in 2015, the vast majority was coming from countries at war or in conflict, 50% were Syrians, 21% Afghans, 9% Iraqis and 4% Eritreans.

The UNHCR estimates that among the migrants crossing the Mediterranean in 2015, 17% are women, 25% are children and 58% are men.

During the First and Second World Wars, the French fled war zones in much larger numbers than the current refugees. After the defeat of the French army in the North of France in the Spring 1940, 8 million civilians, that is one quarter (25%) of the population of the time, took the road to go to the South of the country that was not occupied (according to Jean-Pierre Azema, a renowned French historian).

Screen 2

Pensions and work

The "old age minimum" guarantees elderly people a minimum of 801 euros for people above 65. This social benefit is available to all French nationals, under the condition of being below a certain level of income. It is also available to foreigners, under the condition of meeting at least one of the following requirements: have a work visa for the past 10 years. Have the refugee status or benefit from French protection for having fought under the French flag. Be a national from a EU state or from Switzerland.

According to the National Statistics Institute (INSEE) in 2015, 54.8% of the immigrant population were in the labor force (working or looking for a job) against 56.3% for the rest of the French population. The rate of unemployment for the immigrant population is 18.1% against 9.1% for the rest of the population. There is therefore 44.9% of the immigrant population that works (55.1% for the rest of the population).

Treatment: Fact Check

The respondents first are shown the full text of Alt-Facts treatment and then full text of Facts treatment.

Questionnaire (English translation)

Q1 We are running a study of electoral behavior and attitudes towards migrants. This survey involves a series of questions about yourself and your political beliefs. You will also be asked to play short games that will allow you to win up to 5000 Maximille points. Finally, at the end of the survey you will be asked a series of questions on your political attitudes. You should be able to complete the survey in 10 minutes. Your answers will remain anonymous and we will only publish aggregate results of the study. You can now decide whether you want to continue answering the survey:

- Yes
- No

Q2 What is your birth year?

Q3 What is the size of the village or town you live in?

- Less than 2000 inhabitants
- Between 2000 and 10000 inhabitants
- More than 10000 inhabitants

Q4 What is the highest degree you have obtained?

- No diploma
- Certificat d'Etudes Primaires
- Ancien brevet, B.E.P.C.
- Certificat d'Aptitude Professionnelle (CAP)
- Brevet d'Enseignement Professionnel (BEP)
- BAC d'enseignement technique ou professionnel
- BAC d'enseignement general
- BAC + 2 ou niveau Bac + 2 ans (DUT, BTS, Instituteurs, DEUG, diplomes paramedical ou social)
- Diplome de l'enseignement superieur (2eme ou 3eme cycles, grande ecole)

Q5 Gender

- Male
- Female

Q6 Place of birth

- France
- Abroad

Q7 Place of birth of your father

- France
- Abroad

Q8 Place of birth of your mother

- France
- Abroad

Q9 What is your marital status?

- Married
- In a relationship but not married
- Civil union
- Divorced
- Widowed

Q10 If you add up all the sources of income of your household, in what bracket would your income, net of social contributions, be?

- Less than 1000 euros per month
- Between 1001 and 1500 euros per month
- Between 1501 and 1750 euros per month
- Between 1751 and 2000 euros per month
- Between 2001 and 2500 euros per month
- Between 2501 and 3000 euros per month
- Between 3001 and 4000 euros per month
- Between 4001 and 5000 euros per month
- Between 5001 and 7000 euros per month
- More than 7001 euros per month

Q11 What is the highest degree obtained by your father?

- No diploma
- Certificat d'Etudes Primaires
- Ancien brevet, B.E.P.C.
- Certificat d'Aptitude Professionnelle (CAP)
- Brevet d'Enseignement Professionnel (BEP)
- BAC d'enseignement technique ou professionnel
- BAC d'enseignement general
- BAC + 2 ou niveau Bac + 2 ans (DUT, BTS, Instituteurs, DEUG, diplomes paramedical ou social)
- Diplome de l'enseignement superieur (2eme ou 3eme cycles, grande ecole)

Q12 What is the highest degree obtained by your mother?

- No diploma
- Certificat d'Etudes Primaires
- Ancien brevet, B.E.P.C.
- Certificat d'Aptitude Professionnelle (CAP)
- Brevet d'Enseignement Professionnel (BEP)
- BAC d'enseignement technique ou professionnel
- BAC d'enseignement general
- BAC + 2 ou niveau Bac + 2 ans (DUT, BTS, Instituteurs, DEUG, diplomes paramedical ou social)
- Diplome de l'enseignement superieur (2eme ou 3eme cycles, grande ecole)

Q13 Do you have children?

- Yes
- No

Q14 How many?

- 1
- 2
- 3
- 4
- 5 or more

Q15 Regarding your lodging, are you

- Homeowner
- Currently buying
- Renter
- Housing for free (family, work accommodation...)

Q16 Among the following categories, which one corresponds best to the occupation you have held over the last 7 days?

- Full time paid work
- Part time paid work
- Paid work for less than 15 hours per week
- Employed in family firm
- Studying
- Unemployed
- Retired
- At home
- Sick or handicapped

Q17 Taking into account all the sources of income in your household, what would you say is the primary source?

- Wages
- Income from non wage work (not including farm work)
- Income from farm work
- Pensions
- Unemployment benefits or severance package
- Social benefits
- Income from savings, insurance, rent
- Other

Q18 To obtain political information, what media do you use most often?

- Television
- Radio
- Internet
- National newspapers
- Local newspapers
- Free newspapers
- Other (specify)
- None

Q19 In your opinion, what was the unemployment rate among immigrants in 2015 in France?

- Between 0% and 10%
- Between 11% and 20%
- Between 21% and 30%
- Between 31% and 40%
- Between 41% and 50%
- Between 51% and 60%

- Between 61% and 70%
- Between 71% and 80%
- Between 81% and 90%
- Between 91% and 100%

Q20 What is your religion if you have one?

- Catholic
- Protestant
- Jewish
- Muslim
- Buddhist
- No religion

Q21 How often do you visit religious institutions

- Several time per week
- Once per week
- Once or twice per month
- From time to time
- Only for celebrations, such as weddings
- Never

Q22 Are you registered to vote?

- Yes
- No
- Soon

TREATMENTS:

- 25% chance: Control, which goes directly to Q23
- 25% chance: Alt-Facts
- 25% chance: Fact Check
- 25% chance: Facts

Q23 Among the following candidates how many have programs you overall agree with:

50% chance of getting the following list (with names in random order):

Francois FILLON
Benoit HAMON
Emmanuel MACRON
Jean-Luc MELENCHON

50% chance of getting the following list (with names in random order):

Francois FILLON
Benoit HAMON
Emmanuel MACRON
Jean-Luc MELENCHON
Marine LE PEN

Q24 Did you vote for the National Front in the past?

- Yes
- No

Q25 Are you going to vote for Marine Le Pen in the next presidential election?

- Very unlikely
- Unlikely
- Likely
- Very likely

Q26 Do your agree with Marine Le Pen's proposed policies on immigration?

- Totally agree
- Agree
- Disagree
- Totally disagree

Q27 You are going to have one chance out of ten to win 2500 Maximille points. The result of the lottery will be announced at the end of the survey. If you do obtain the 2500 Maximille points, you have to decide whether you want to transfer part of the amount to a random participant in this survey. You can give all, nothing, or part of the 2500 points. You will never find out the identity of the other participant and she/he will never discover yours.

How much do you want to transfer?

Q28 Again, you are going to have another one chance out of ten to win 2500 Maximille points. The result of the lottery will be announced at the end of the survey. If you do obtain the 2500 Maximille points, you have to decide whether you want to transfer part of the amount to a participant in this survey who answered likely or very likely to the question "Are you going to vote for Marine Le Pen in the next presidential election?." You can give all, nothing, or part of the 2500 points. You will never find out the identity of the other participant and she/he will never discover yours.

How much do you want to transfer?

Q29 The political beliefs of French voters are usually measured on a left-right scale. Personally how would you place yourself on such a scale?

from -5 (extreme left) to 5 (extreme right)

Q30 Who did you vote for in the first round of the presidential election of 2012?

- Hollande
- Sarkozy
- Melenchon
- Le Pen
- Another candidate
- Blank vote
- Did not vote
- Not registered to vote

Q31 In your opinion, what reasons drive migrants to Europe in the last two years?

- Mostly economic reasons
- Mostly security reasons
- Other reasons

Q32 We are going to present you with a list of institutions. For each of them, please indicate the level of confidence you have in them: a lot, some, not a lot, not at all.

(a) INSEE (French Statistical Agency)

(b) United Nations

(c) Ministry of economy

(d) OECD

Q33 What is the proportion of men among refugees who crossed the Mediterranean in 2015?

- Between 0% and 10%
- Between 11% and 20%
- Between 21% and 30%
- Between 31% and 40%
- Between 41% and 50%
- Between 51% and 60%
- Between 61% and 70%
- Between 71% and 80%
- Between 81% and 90%
- Between 91% and 100%

Q34 What proportion of the French population fled from the North to the South of France in the spring of 1940?

- Between 0% and 10%
- Between 11% and 20%
- Between 21% and 30%
- Between 31% and 40%
- Between 41% and 50%
- Between 51% and 60%
- Between 61% and 70%
- Between 71% and 80%
- Between 81% and 90%
- Between 91% and 100%

Q35 In 2015 what proportion of the French immigrant population was working?

- Between 0% and 10%
- Between 11% and 20%
- Between 21% and 30%
- Between 31% and 40%
- Between 41% and 50%
- Between 51% and 60%
- Between 61% and 70%
- Between 71% and 80%
- Between 81% and 90%
- Between 91% and 100%

Q36 In the first game you played, what were your chances of getting 2500 Maximille points (before your transfer decision)?

- 0 chances out of 10
- 1 chances out of 10
- 2 chances out of 10
- 3 chances out of 10
- 4 chances out of 10
- 5 chances out of 10
- 6 chances out of 10
- 7 chances out of 10
- 8 chances out of 10
- 9 chances out of 10
- 10 chances out of 10