



# JOCLAD 2021

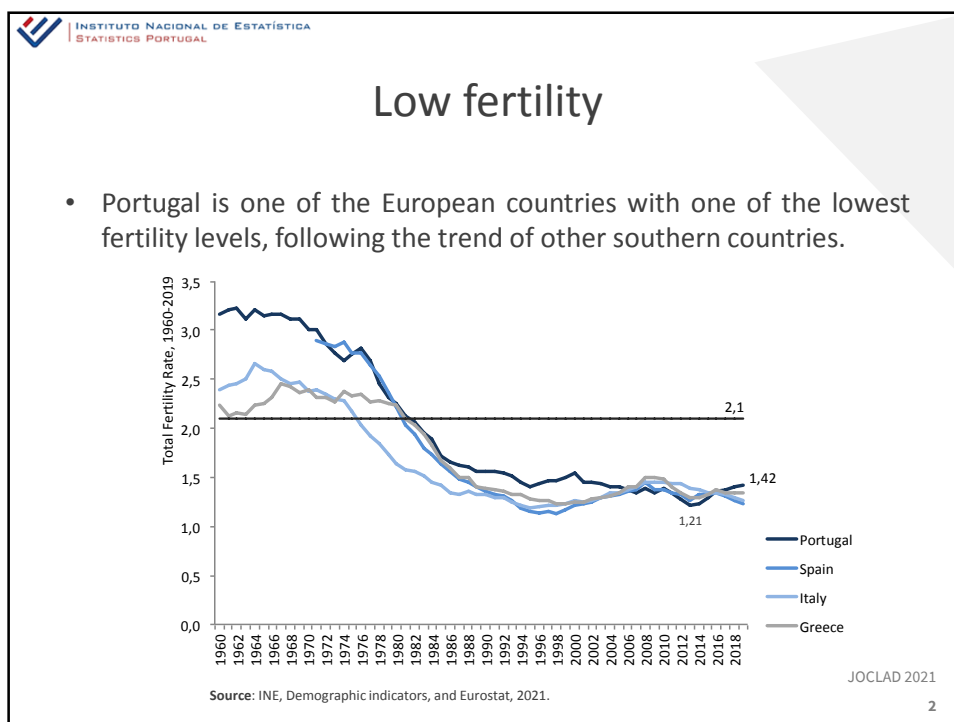


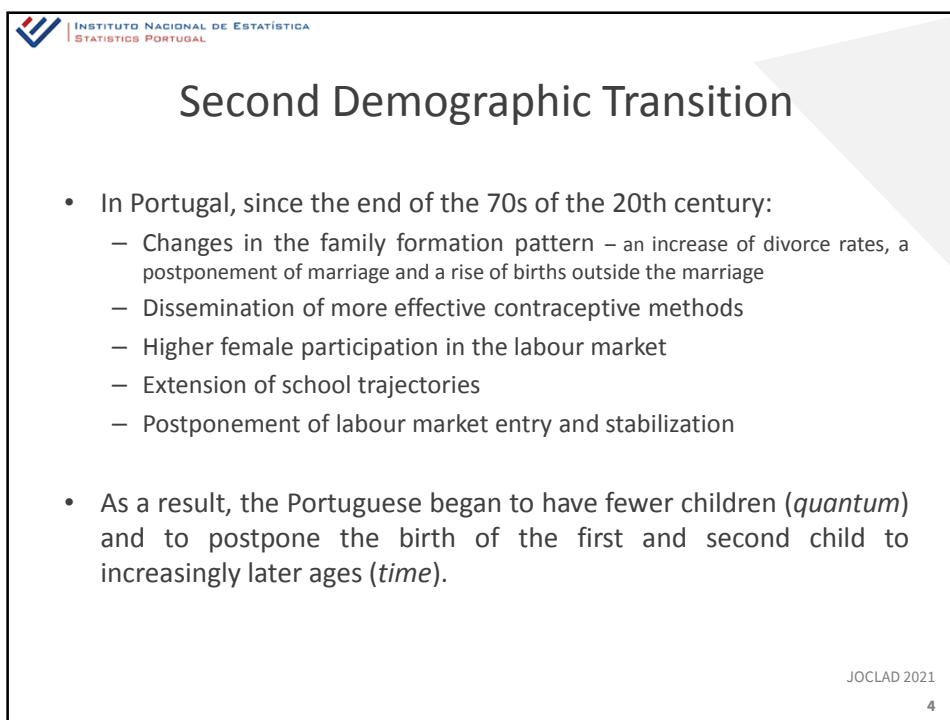
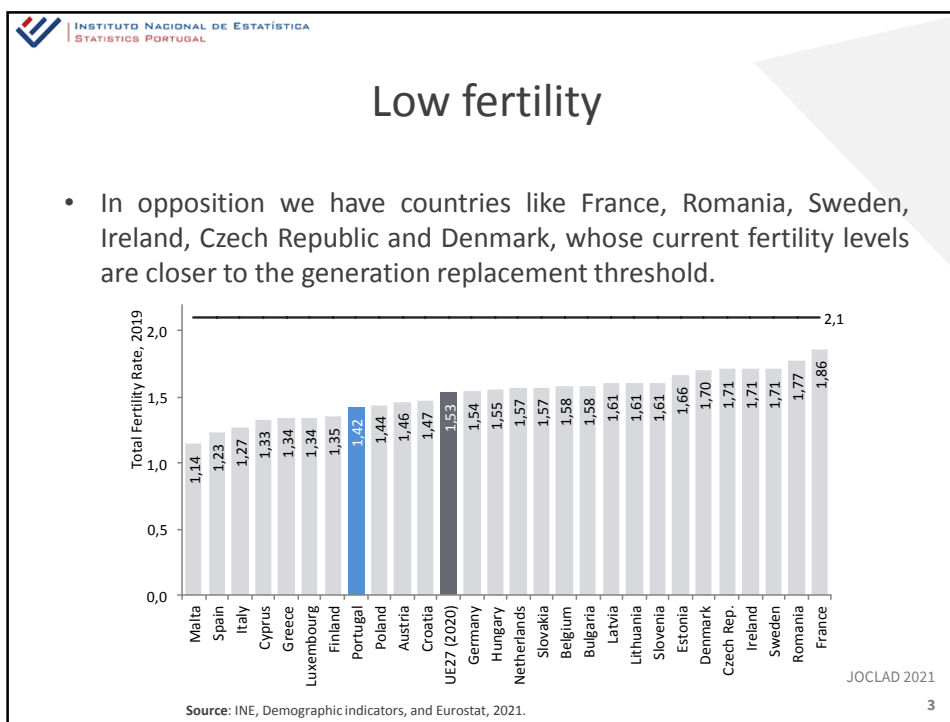
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## Second Child: An Uncertain Transition


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## Second Child: An Uncertain Transition

- However, postponing the birth of the first child implies a shorter time interval to realize one's reproductive plans.

Fertility Survey (IFEC 2019)

- The majority (60.2%) of residents in Portugal in childbearing ages (women aged 18-49 and men aged 18-54) expected to end the reproductive cycle with at least two children, although:
  - Most of these people had either not yet entered parenthood (42.7%) or had only one child (9.8%)
  - 47,5% had already transitioned to the second or third child

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- Sample of 2 979 men and women who had at least one child and expected to have two or more children along their childbearing years.
- Considering the complex sampling defined for this survey, which allows us to obtain a representative sample of the resident population in childbearing ages, it is estimated that:
  - 265.8 thousand residents in Portugal in childbearing ages had not yet transitioned to the second child
  - 1.2 million already had at least two children

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- Those who had not (yet) transitioned to the second child:
  - Had their first child later and almost 2 years after than they desired
  - Entered the labour market and conjugality later
  - Ceased cohabitation with household of origin later

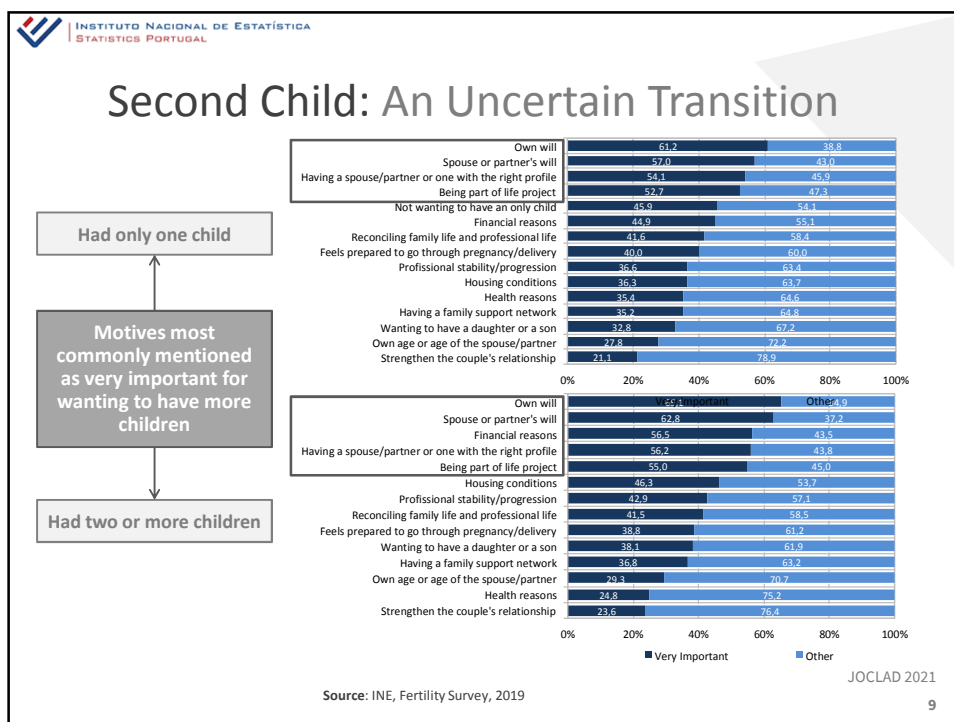
| Life Event  | Did not (yet) had the 2nd child | Transitioned to the 2nd child |
|---|---------------------------------|-------------------------------|
| Age   | 35,5                            | 43,2                          |
| Age at first paid job                                     | 19,4                            | 18,3                          |
| Age at cessation of cohabitation with household of origin | 24,2                            | 22,9                          |
| Age at first cohabitation                                 | 25,5                            | 23,9                          |
| Age at birth of 1st biological child                      | 29,6                            | 26,0                          |
| Desired age for having the first child                    | 27,0                            | 25,1                          |

Idade média

■ Did not (yet) had the 2nd child ■ Transitioned to the 2nd child

Source: INE, Fertility Survey, 2019


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- The motives most commonly mentioned as very important for the intention to have more children do not clearly distinguish those who have not (yet) reached the fertility of two children from those who already did.
  - Own will or spouse/partner's will
  - Having a spouse/partner or one with the right profile
  - Being part of life project
- What other factors, that could be subject to public policies intervention, differentiate those who have not yet transitioned to their second child?

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- By adjusting logistic regression models, we searched for factors that best differentiate those:
  - who have only one child, but intend to have at least two
  - vs.
  - already transitioned to the second child


$$\pi(X) = E(Y|X) = \frac{1}{1 + e^{-(\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_p X_p)}}$$

where

$$\pi(X) = E(Y|X)$$

represents the mean of the response variable  $Y$  conditioned on the values of the  $p$  explanatory variables (factors), such that  $X = (X_1, X_2, \dots, X_p)$ .


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- Methodology proposed by Hosmer and Lemeshow (2013)
- Response variable:
  - 0 – individuals with 2 or more children
  - 1 – individuals with 1 child that intend to have at least 2 children
- Explanatory variables identified in the literature as conditioning or enhancing fertility, such as:
  - age, age at birth of the first child, sex, migratory and family background, marital status, socioeconomic variables;
  - opinions and perceptions about fertility;
  - Lifelong desired fertility;
  - Quantity vs. Quality: opinion on whether it is preferable to have only one child, with more opportunities and fewer restrictions;
  - ...


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- Adjusted the categories of some variables.
- Continuous variables – verified the assumption of linearity with the *logit* function, using the quartile method and the fractional polynomial method.
- Analysed possible outliers (Pearson and Deviance residuals) and influential observations on the model parameters (Cook distance and DfBetas).
- Goodness of fit and discriminating capacity:
  - Hosmer e Lemeshow test:  $\chi^2 = 9.32$ ,  $df = 4$ ,  $p$  value = 0.06
  - Nagelkerke coefficient of determination ( $RN^2$ ) = 0.21
  - Area under the curve (AUC) of the receiver operating characteristic curve, AUC = 0.78

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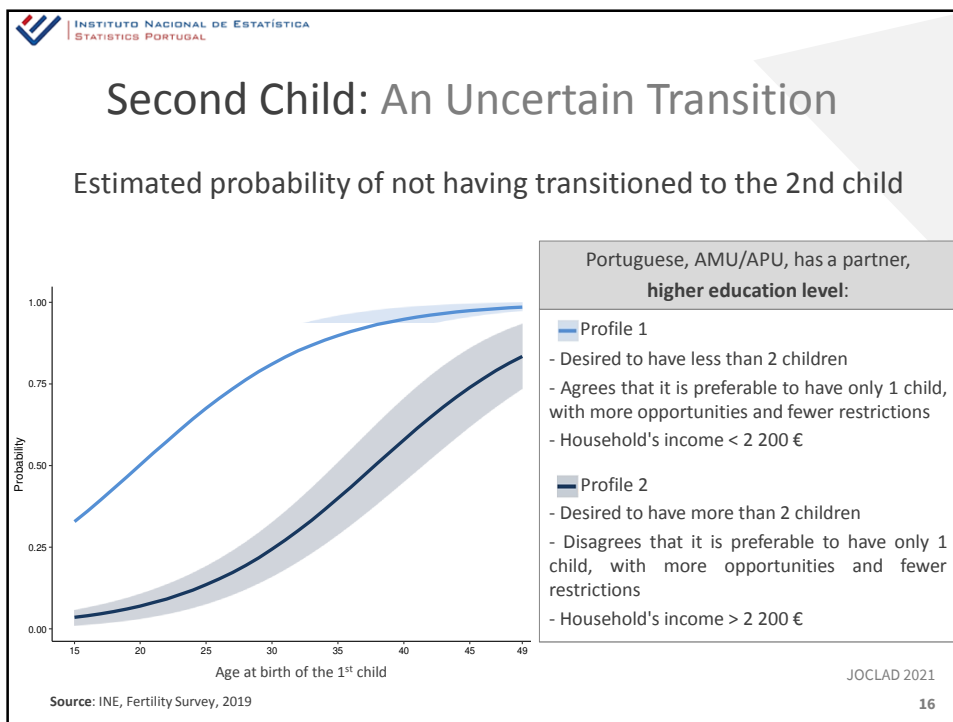
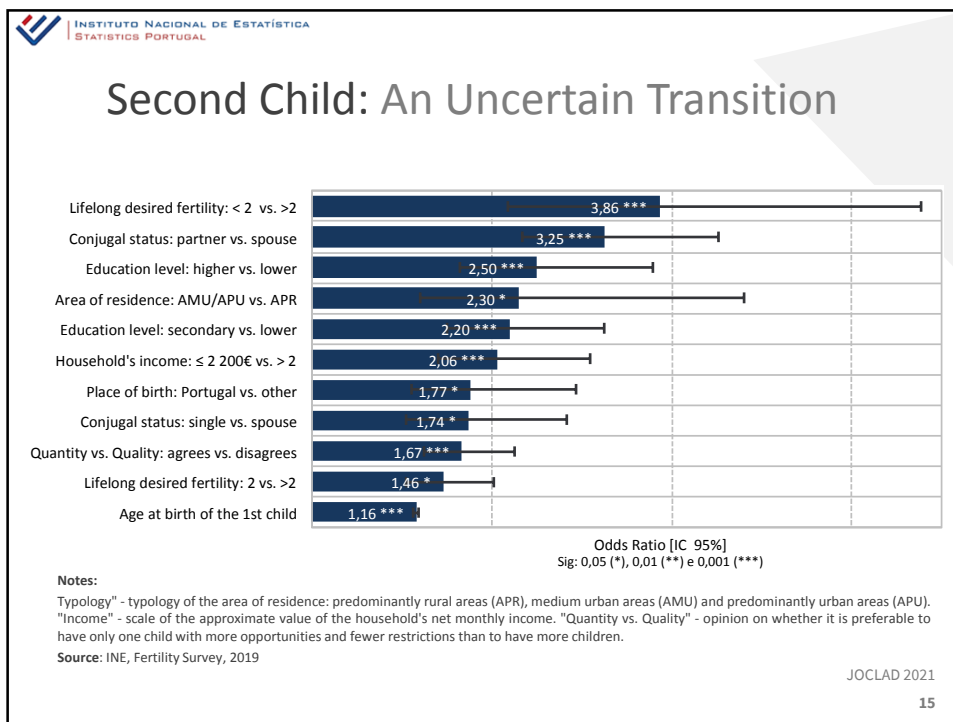
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## Second Child: An Uncertain Transition


| Explanatory variables  | Expected fertility of 2 or more children:<br>Realized fertility = 1 vs. Realized fertility $\geq 2$ |      |         |      |                   |
|--|---|------|---------|------|-------------------|
|  | Coefficients  | sd   | p value | OR   | CI <sub>95%</sub> |
| <b>Lifelong desired fertility</b> (ref. more than 2 children)  |   |      |         |      |                   |
| 2 children   | 0,38  | 0,17 | 0,023   | 1,46 | (1,05-2,02)       |
| less than 2 children   | 1,35  | 0,29 | < 0,001 | 3,86 | (2,18-6,77)       |
| <b>Opinion on whether it is preferable to have only one child, with more opportunities and fewer restrictions</b> (ref. disagrees) |   |      |         |      |                   |
| agrees   | 0,51  | 0,15 | < 0,001 | 1,67 | (1,24-2,25)       |
| <b>Marital status</b> (ref. has a spouse)  |   |      |         |      |                   |
| has a partner  | 1,18  | 0,17 | < 0,001 | 3,25 | (2,34-4,52)       |
| single   | 0,55  | 0,25 | 0,029   | 1,74 | (1,04-2,83)       |
| <b>Education level</b> (ref. lower)  |   |      |         |      |                   |
| secondary  | 0,79  | 0,20 | < 0,001 | 2,20 | (1,50-3,25)       |
| higher   | 0,91  | 0,21 | < 0,001 | 2,50 | (1,65-3,79)       |
| <b>Scale of the approximate value of the household's net monthly income</b> (ref. $\geq 2$ 201€)                                   |   |      |         |      |                   |
| up to 2 200€   | 0,73  | 0,20 | < 0,001 | 2,06 | (1,40-3,10)       |
| <b>Place of birth</b> (ref. other)   |   |      |         |      |                   |
| Portugal   | 0,57  | 0,25 | 0,021   | 1,77 | (1,11-2,94)       |
| <b>Typology of the area of residence</b> (ref. APR)  |   |      |         |      |                   |
| AMU/APU  | 0,83  | 0,35 | 0,017   | 2,30 | (1,21-4,81)       |
| <b>Age at birth of the 1st child</b>   | 0,14  | 0,02 | < 0,001 | 1,16 | (1,12-1,19)       |

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Source: INE, Fertility Survey, 2019






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- The results show that, in 2019, if one's will is the first step towards having children, the circumstances that may lead to not fulfilling their intentions are enhanced by several factors:
  - Postponement of entering parenthood
  - Lower lifelong fertility desires
  - Not having a spouse
  - Higher education level (factor directly associated with the postponement of entering the labour market)
  - Lower household income (financial insecurity)


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- The non-transition to the second child is also related to the possibility of limiting the number of children in order to provide them with fewer restrictions and more opportunities.
- Overall, we conclude that in a situation of greater constraints and economic uncertainties, it may not be possible to outline future projects with a higher level of security.
- Therefore, enhancing the probability of not having the second child that was once intended.

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**Second Child: An Uncertain Transition**

**Obrigada**

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