

Reluctance to report criminal incidents: social exclusion and limited access to justice¹

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Abstract

Objective measures of access to justice are mainly supply-side indicators from judicial statistics, whereas survey questions related to judicial services that provide demand-side information measure perceptions and are subjective. We construct a demand-side objective indicator using Turkey's Life Satisfaction Survey. We consider reluctance to report an experienced criminal incident, which is a factual statement, as an objective indicator affecting demand for and access to justice. We identify correlates of reluctance to report and find that low education levels have a negative impact on the probability of reporting a criminal incident, and that the impact is greater for women. Social pressures related to gender and level of income adversely affect their probability of reporting; whereas men are not affected by any kind of social pressure in their decision to report criminal incidents. We then relate our findings with perceptions of judicial services and find that reluctance to report is correlated with reluctance to reveal (dis)satisfaction.

Keywords: Access to justice, life satisfaction, social exclusion

JEL Codes: C31, J16, K40

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1. Introduction

Access to justice, alongside access to education and access to health range among primary determinants of greater equity and efficiency. Access to justice, and equal opportunities to access, are components of rule of law and its role in economic and social development. Access to justice enhances voice and accountability and contract enforcement, which contribute to greater economic and political efficiency. Equal access to justice further reduces exclusion and discrimination based on gender, race, religion (beliefs), age, disability, and socio-economic status (e.g. material assets, employment status, residential locality), which contribute to equity, and greater efficiency and societal well-being. To quote the United Nations definition: “Access to justice is a basic principle of the rule of law. In the absence of access to justice, people are unable to have their voice heard, exercise their rights, challenge discrimination or hold decision-makers accountable”², likewise the World Justice Project defines the rule of law, and access to justice, as the major contribution to a well-functioning liberal democracy: access to justice is “a fundamental component of rule of law, and the failure of justice systems to meet justice needs compounds inequality, erodes trust in institutions, and renders societies vulnerable to a populist backlash against core rule of law norms, as we see in too many parts of the world today.” (World Justice Project, 2019)³. The right to justice is now widely recognized: in UN’S Sustainable Development Goals (Goal 16: Peace, justice and strong institutions, Target 16.3: Promote the rule of law and ensure equal access to justice)⁴, in the Universal Declaration of Human Rights (UDHR) and in several other texts at the international, regional and national level.

Quantitative measurement of access to justice can be done from different dimensions. Much of the empirical literature is based upon factors that are measured using judicial services information such as administrative data and court records⁵. These can be both de jure rules and de facto outcomes that affect both supply of and demand for judicial services: written and formal rules regulating the functioning of the judicial services provision and processes vs. outcomes (e.g. judicial statistics on caseload, duration of litigation/ court delay, proximity of judicial services providers, court fees, prosecutors’ and judges’ preferences and incentives that shape decision making⁶, etc.). While such data captures supply side factors more accurately, demand side factors, namely from non-legal origin, are less captured. More, the population (demand side) is usually limited either because it only covers effective beneficiaries (those that access justice) or covers only partially the population

² <https://www.un.org/ruleoflaw/thematic-areas/access-to-justice-and-rule-of-law-institutions/access-to-justice/>

³ World Justice Project (2019). World Justice Forum Report 2019.

https://worldjusticeproject.org/sites/default/files/documents/WJP-ForumReport-October-2019-Online_0.pdf

⁴ <https://sdgs.un.org/goals>

⁵ Among the very vast literature see surveys in Albiston, C. R., & Sandefur, R. L. (2013). Expanding the empirical study of access to justice. *Wis. L. Rev.*, 101; and Voigt, S. (2016). Determinants of judicial efficiency: a survey. *European Journal of Law and Economics*, 42(2), 183-208.

⁶ Posner, R. A. (1993). What do judges and justices maximize - (The same thing everybody else does). *Supreme Court Economic Review*, 3, 1-41.

that could potentially access but does not (this population may be studied with specifically designed surveys with relatively small samples, usually not representative at the national level).

Large sample surveys from the beneficiaries' (demand) perspective are, at best, values or satisfaction surveys that include direct or indirect questions relative to trust or satisfaction with the judiciary or rule of law or quality of government (e.g. World Values Surveys, Gallup Polls, Life Satisfaction Surveys). Questions in such surveys actually measure subjective outcome evaluations rather than objective actual experiences. Likewise, indicators can be constructed additionally using perceptions of qualified persons (field experts and practitioners) on outcomes again measured through surveys (e.g. World Justice Project, World Governance Indicators)⁷. Objective (not based on perception) information affecting general population's experiences, or lack thereof, with the judiciary are rare. Nation-wide household surveys conducted by national statistical institutions usually lack questions relative to access to and demand for justice. Factors that affect the effective behavior and access to justice of potential and/or beneficiaries is also referred to as the 'sociolegal' approach. Besides the growing literature based on randomized controlled trials, the empirical research from the sociolegal perspective based on surveys with questions on factual experiences is relatively less abundant.⁸

One important issue is the reluctance to take to court a potentially justiciable experience. Studies show that, alongside factors affecting supply and demand of judicial services mentioned above, this issue is also related to non-judicial factors⁹. There are various explanations for such behavior ranging from lack of capabilities in identifying the potentially legal aspect (thereof identify the experience as justiciable) to choosing alternative, usually private, ways of conflict resolution.

Here, using Turkey's Life Satisfaction Survey (2013)¹⁰, we exploit questions directly related to respondents' exposure to any criminal incident and to whether they report or not the incident(s).

⁷ For World Governance Indicators: "These aggregate indicators combine the views of a large number of enterprise, citizen and expert survey respondents in industrial and developing countries. They are based on over 30 individual data sources produced by a variety of survey institutes, think tanks, non-governmental organizations, international organizations, and private sector firms." (<http://info.worldbank.org/governance/wgi/#home>), and for the World Justice Project "To present an image that accurately portrays the rule of law as experienced by ordinary people, each score of the Index is calculated using a large number of questions drawn from two original data sources collected by the World Justice Project in each country: a General Population Poll (GPP) and a series of Qualified Respondents' Questionnaires (QRQs)." (https://worldjusticeproject.org/sites/default/files/documents/Methodolgy_17-18.pdf) Other evaluations of politics in their historical dimension are directly assessed by country experts (e.g. Polity V, Varieties of Democracy).

⁸ In practice, rather than analysis based on national survey data (which lack the relevant questions and dimensions), policies are simply designed by identifying potentially vulnerable populations through indicators of social, economic and cultural indicators (OECD, 2019 provides examples).

⁹ This issue is analyzed in the pioneering study of the Civil Litigation Project's report based on a comprehensive survey designed in a sociolegal perspective (Trubek, D. M., Grossman, J. B., Felstiner, W. L., Kritzer, H. M., Sarat, A. (1983). Civil Litigation Research Project Final Report. Volume 1, Studying the Civil Litigation Process, The CLRP (Civil Litigation Research Project) Experience. Madison: University of Wisconsin Law School.)

¹⁰ The 2013 survey is the only survey representative at provincial level and allows controlling the vast inter-provincial heterogeneities that exist in Turkey "The [LSS] survey has been carried out regularly every year since 2003. The sample

The valuable information related to the decision to report a criminal incident is a factual statement of an explicitly recognizable and judiciable experience, and constitutes a proxy for an objective, demand-side, measurement of intentionally not having recourse to justice given that the necessary preliminary step for a judiciary process to start upon criminal incidents is to report the incident. We then identify the characteristics of individuals who do not report experienced criminal incident, i.e. who chose not to access justice despite incidence, and thus identify non-legal factors that impede resorting to justice.

Subsequently, we try to understand the particularly high incidence of the ‘no idea’ response to questions on perception of and satisfaction with the judicial system. This is all the more important that its occurrence is greater amongst women. One explanation, is that women are more marginalized and have less access to justice, such that they literally have no idea. However, the share of the no idea response being also high among men, we try to understand whether there is relation between reluctance to report and having “no idea” which would then actually imply reluctance to reveal preference (or level of satisfaction). To this end we run bivariate probit estimations with each of the three questions on perception of judicial services and reluctance to report to determine whether the characteristics of the two groups of respondents are related. In the following section we present the data, then expose our estimation strategy and discuss our results. In the final section, we conclude.

2. Data

The decision to report or not upon exposure to a criminal event is a question that allows us to assess access to justice from the demand side with a number of advantages. For one, the individual is not relating a perception. Second, exposure to crime is an explicit motive that would potentially lead an individual to report to police or gendarmerie, the first bodies of authority in the judicial process of criminal events. Third, although many studies in advanced economies privilege access to civil justice, access to criminal justice may also be an issue in many societies. In 2012 The U.N. General Assembly adopted Principles and Guidelines on Access to Legal Aid in Criminal Justice Systems and recognized “that legal aid is an essential element of a fair, humane and efficient criminal justice system that is based on the rule of law and that it is a foundation for the enjoyment of other rights, including the right to a fair trial, as a precondition to exercising such rights and an important safeguard that ensures fundamental fairness and public trust in the criminal justice process”.¹¹ Fourth, although the resolution of conflicts that can potentially turn into civil litigation may not be reported because of the difficulties in defining it in legal terms, criminal events are more

size of the survey in the years of 2003-2012, was calculated to produce estimates on the basis of Turkey, rural, urban. For the first time in 2013, the sample size of the survey was calculated to produce estimates on the base of Statistical Regions (SR) Level 3. Since 2014, the sample size of the survey has been designed to produce estimates at Turkey level.” https://tuikweb.tuik.gov.tr/MicroVeri/YMA_2019/english/index.html

¹¹ https://www.unodc.org/documents/justice-and-prison-reform/UN_principles_and_guidelines_on_access_to_legal_aid.pdf

straightforward and are less likely to be unidentified for cognitive reasons. In other words, non-access captured by reluctance to report is most likely to capture an intentional abstinence for accessing, unlike potentially civil cases where the probability of not taking to court may be unintentional. Finally, public order services are much more widespread and their access is less costly.

Table 1 gives the eight questions that relate to crime exposure in the survey which is the dependent variable of our first estimation. After each question the respondent is asked “Did you resort to the police/gendarmerie for this incident?”. Our Q1 dummy variable is defined as having experienced at least one of the eight experiences but that is not reported. In other words, if the respondent’s answer is yes to at least one or more of the questions below and that additionally he/she says that he/she has reported it Q1 takes the value of one, and zero otherwise, i.e. if he/she has not experienced any criminal event or if he/she has experienced an event or more but has reported it.

The different incidents are exposure to: burglary, snatching or pickpocketing; extortion; injury or assault; ill-treatment by family member; blackmail or threat; sexual crime; swindle and other types of criminal incidents. Among those having experienced at least one criminal incident 56% report the incident to the police or gendarmerie.

Tables 2 and 3 give the questions relative to perception of the judicial system: Q2, Q3 and Q4 which are the alternative dependent variables that we will consider in our second estimation. These are related with perception of fairness and impartiality, the judicial process, and general satisfaction with judicial services. The incidence of no idea response is particularly high for these questions: at least 50% for Q2 and Q3 and 33% for Q4. We assign the value of one to a yes response and zero otherwise, and compare individuals pairwise: those for whom Q1 and perceptions question both take the value of one. This comparison allows us assessing the relation between reluctance to report and probability of having ‘no idea’. The existence of a relation would imply that having no idea actually corresponds to a reluctance of revealing satisfaction preferences with the judicial services.

Table 4 give the variables that we add as controls in order to assess the impact of various types of social pressures. For each variable we compute the average of categorical responses where the answers never, sometimes, often and always are respectively assigned the value of 0, 1, 2 and 3.

Table 1: Exposure to crime

Q1: Experienced any criminal incident (8 separate questions)		Experienced any incident		Reported to the police	
		Mean	Std. Dev.	Mean	Std. Dev.
1	Have you experienced burglary snatching, pickpocketing?	0.0234	0.1511	0.329	0.47
2	Have you experienced extortion?	0.0017	0.0413	0.283	0.451
3	Have you experienced any injuries or assaults?	0.0030	0.0547	0.255	0.436
4	Have you experienced ill-treatment by any of your family members?	0.0043	0.0653	0.652	0.477
5	Have you experienced blackmail or threats for any reason?	0.0043	0.0651	0.426	0.495
6	Have you experienced victimization due to sexual crimes?	0.0009	0.0298	0.546	0.499
7	Have you experienced victimization due to swindle?	0.0066	0.0813	0.512	0.5
8	Have you experienced any victimization for any other reason than these?	0.0047	0.0683	0.591	0.492
Q1: Experienced any listed victimizations above		0.04231	0.20129	0.56	0.496

Source: Life Satisfaction Survey (2013).

Table 2: Questions related to problems in the judicial system

		1 No	2 Some	3 Many	4 No idea
Q2: Generally, related to the court and the judicial system, is there any problem with the fair and impartial application of the laws to all individuals?	Mean	0.21	0.097	0.145	0.548
	Std. Dev.	0.408	0.295	0.352	0.498
Q3: Generally, related to the court and the judicial system, is there any problem in the judicial process?	Mean	0.23	0.115	0.093	0.562
	Std. Dev.	0.421	0.319	0.29	0.496

Source: Life Satisfaction Survey (2013).

Table 3: Question related to satisfaction with the judicial system

		1 Very satisfied	2 Satisfied	3 Moderate	4 Not satisfied	5 Not satisfied at all	6 No idea
Q4: Are you satisfied with judicial services?	Mean	0.027	0.505	0.058	0.061	0.018	0.331
	Std. Dev.	0.161	0.5	0.235	0.239	0.133	0.471

Source: Life Satisfaction Survey (2013).

Table 4: Questions related to social pressure

		1	2	3	4
		Never	Sometimes	Often	Always
Do you feel any social pressure due to your gender?	Mean	0.932	0.042	0.021	0.005
	Std. Dev.	0.252	0.201	0.142	0.073
Do you feel any social pressure due to your customs and traditions?	Mean	0.966	0.025	0.007	0.002
	Std. Dev.	0.18	0.156	0.081	0.043
Do you feel any social pressure due to your religious beliefs and behaviors?	Mean	0.959	0.028	0.009	0.003
	Std. Dev.	0.197	0.166	0.095	0.056
Do you feel any social pressure due to your political view?	Mean	0.969	0.022	0.007	0.002
	Std. Dev.	0.173	0.146	0.083	0.045
Do you feel any social pressure due to your hometown?	Mean	0.971	0.02	0.007	0.002
	Std. Dev.	0.168	0.14	0.083	0.047
Do you feel any social pressure due to your level of income?	Mean	0.959	0.027	0.011	0.004
	Std. Dev.	0.199	0.161	0.103	0.063

Source: Life Satisfaction Survey (2013).

3. Estimation and results

In a first step we identify the characteristics of non-reporting individuals with the following probit estimation:

$$e_i = \beta_0 + \beta X_i + \gamma H_i + R + \epsilon_i$$

where an individual having experienced a criminal incident and reported to the police, e_i takes the value 1, and 0 for the non-reported case. Table 1 provides a short description of our key dependent variable. X_i is a vector of variables giving information on individual characteristics such as gender, age, education (category) level, marital status (category), social security registration (head or spouse has registered with the social security system).¹² H_i is a vector of variables related to household attributes such as household size and type of accommodation. R stands for provincial controls. We also include several individual assessments of respondents related to social conditions, given in table 5. ϵ_i is the error term. Table 4 summarizes the set of controls used in the regressions.

The two-equation binary choice model (bivariate probit) relating the reporting a case (denoted by $e_i = 1$ if reported, zero if otherwise) and questions (Q2, Q3 and Q4) related to the judicial system (denoted by $p_2 = 1$ if the respondent has no idea, zero if he/she has a definitive opinion) can be written as

¹² Turkey's social security system is based on first degree kinship.

$$e_{i,1}^* = \beta_1 X_{i,r} + \gamma_1 H_{i,r} + \mu_1 \text{ with } \epsilon_{i,1} = 1 \text{ if } e_{i,1}^* > 0 \text{ otherwise}$$
$$p_{i,2}^* = \beta_2 X_{i,r} + \gamma_2 H_{i,r} + \mu_2 \text{ with } p_{i,2} = 1 \text{ if } p_{i,2}^* > 0 \text{ otherwise}$$

where $e_{i,1}^*$ and $p_{i,2}^*$ are the latent variables of the two outcome equations and where the μ 's are zero mean random disturbances jointly normally distributed, with the correlation coefficient denoted by ρ . The non-observable part of the related behavior may be explained through the residual covariance structure. A residual covariance significantly different from zero may serve as an indicator of unobserved dependency between two different attitudes. In other words, if ρ is significantly different from zero, then both responses depend on the common unobserved disturbance, and the likeliness of being reluctant to report a case is correlated with the likeliness of having a definitive opinion on judicial system. We argue that individual historicity related to limited access to justice would require the correlation, i.e. ρ , to be negative and significant. Notice that this empirical model only allows to capture the endogeneity of these two responses, without asserting any direction of causality. To establish such a causal link, we would need to know the motivation of the agents and have more information on their experiences with judicial system, besides their personal views.

Table 6 gives the results for the probit estimation. Note that adding province fixed effects significantly improves the results. Overall, for the full model including all controls, and considering results for men and women separately common significant factors can be summarized as follows: the probability to report increases with age and decreases with low levels of education and pressure. Considering the religious beliefs of others important also decreases the incidence of reporting. Communitarian lifestyle preferences may increase the preference for intra-communitarian conflict resolution and inhibit access to justice, all the more so if crime incidence is more likely to occur within the community.

The model has greater explanatory power for women¹³, a larger number of covariates are significant: education affects women more adversely. Men are negatively affected only at no schooling level, whereas women with primary and lower secondary high school education are also negatively affected. Marital status also matters, married and widowed women are more likely to report compared to single women and there no significant effect of divorced women. This is in conformity with conservative society dynamics where marriage is a status, and being widowed is likely to occur at a later stage of the lifecycle where women are less vulnerable to social pressure. Household size also has a negative impact, unlike for men. Finally, gender based social pressure, and pressure related to level income also negatively affect women's probability to report.

Table 7 gives the results of the bivariate probit estimations. ρ has a negative sign and is significant

¹³ On issues related to women's access to justice in Turkey based on qualitative evidence see Hatipoğlu-Aydın, D., & Aydın, M. B. (2016). The gender of justice system: Women's access to justice in Turkey. *International Journal of Law, Crime and Justice*, 47, 71-84.

for all pairs except for men in the case of the Q1 and Q2 pair. The negative sign means that there is a negative correlation between the decision to report crime incident and having ‘no idea’ in terms of perception of judicial services. In other words, the no idea response is related to reluctance to report. As crime incident is identified as a potential judicial conflict, we interpret the no idea response as reluctance to reveal preference. The correlation is greater for women and the highest value is in the case of the Q1-Q3 pair the question on overall satisfaction with the judicial services.

Table 5: Descriptive Summary

	Mean	Std. Dev
Age	41.754	15.119
Gender	0.518	0.5
No school completed	0.139	0.346
Primary education	0.363	0.481
Lower secondary education	0.094	0.291
Higher secondary school	0.141	0.348
Vocational and technical high school	0.046	0.21
Tertiary education of 2 or 3 years	0.058	0.233
Tertiary education of 4 years	0.094	0.291
Tertiary education of 5 or 6 years	0.017	0.131
Doctorate	0.049	0.215
Never married	0.156	0.363
Married	0.75	0.433
Divorced	0.045	0.208
Widowed	0.049	0.216
Not working	0.571	0.495
Working (private)	0.34	0.474
Working (public)	0.089	0.285
Paying rent	0.271	0.445
Incidence reported to the police (any one of the 8 types) (Q1)	0.56	0.496
Judicial process - no idea=1 (Q2)	0.407	0.491
Fair and impartial law - no idea=1 (Q3)	0.388	0.487
Judicial satisfaction - no idea=1 (Q4)	0.286	0.452
Religious beliefs of other people are important	0.495	0.5
Social pressure resulting from your political view	0.102	0.302
Social pressure resulting from your gender	0.13	0.336
Social pressure resulting from your custom and traditions	0.086	0.28
Social pressure resulting from your religious beliefs and behaviors	0.075	0.263
Social pressure resulting from your hometown	0.073	0.261
Social pressure resulting from your level of income	0.086	0.28

Source: Life Satisfaction Survey (2013).

Table 6 Probit estimations – Average marginal effects

DV=Experienced a criminal incident and reported to police	All				Women				Men			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Female =1	0.015 (0.012)	0.020 (0.013)	0.034** (0.013)	0.026** (0.013)								
Age	0.003*** (0.001)	0.003*** (0.001)	0.002*** (0.001)	0.002*** (0.001)	0.003*** (0.001)	0.003*** (0.001)	0.002*** (0.001)	0.002*** (0.001)	0.003*** (0.001)	0.003*** (0.001)	0.003*** (0.001)	0.003*** (0.001)
No school completed	-0.182*** (0.022)	-0.142*** (0.024)	-0.147*** (0.023)	-0.121*** (0.024)	-0.212*** (0.029)	-0.169*** (0.031)	-0.173*** (0.030)	-0.143*** (0.031)	-0.147*** (0.041)	-0.110** (0.043)	-0.110** (0.043)	-0.084* (0.044)
Primary school	-0.065*** (0.018)	-0.053*** (0.018)	-0.056*** (0.018)	-0.058*** (0.018)	-0.098*** (0.026)	-0.084*** (0.026)	-0.090*** (0.026)	-0.083*** (0.026)	-0.039 (0.024)	-0.029 (0.025)	-0.030 (0.025)	-0.040* (0.024)
Lower secondary education	-0.020 (0.023)	-0.014 (0.023)	-0.017 (0.023)	-0.019 (0.022)	-0.082** (0.035)	-0.074** (0.035)	-0.077** (0.035)	-0.068** (0.035)	0.026 (0.030)	0.029 (0.030)	0.027 (0.030)	0.013 (0.029)
Vocational and technical high school	-0.013 (0.028)	-0.019 (0.029)	-0.024 (0.028)	-0.033 (0.028)	0.002 (0.043)	-0.003 (0.044)	-0.009 (0.045)	-0.017 (0.045)	-0.024 (0.037)	-0.033 (0.038)	-0.038 (0.037)	-0.054 (0.037)
Tertiary education of 2 or 3 years	-0.002 (0.026)	-0.002 (0.027)	0.000 (0.027)	-0.001 (0.026)	0.008 (0.039)	0.012 (0.040)	0.011 (0.040)	0.006 (0.039)	-0.011 (0.035)	-0.014 (0.036)	-0.013 (0.036)	-0.012 (0.035)
Tertiary education of 4 years	-0.012 (0.022)	-0.012 (0.024)	-0.006 (0.024)	-0.001 (0.024)	-0.037 (0.034)	-0.031 (0.037)	-0.016 (0.037)	-0.017 (0.037)	0.010 (0.030)	0.005 (0.031)	0.004 (0.032)	0.009 (0.031)
Tertiary education of 5 or 6 years	0.019 (0.042)	0.021 (0.043)	0.032 (0.043)	0.027 (0.042)	0.013 (0.062)	0.020 (0.065)	0.031 (0.063)	0.028 (0.062)	0.027 (0.057)	0.022 (0.058)	0.032 (0.058)	0.017 (0.058)
Doctorate	-0.035 (0.029)	-0.022 (0.029)	-0.026 (0.028)	-0.005 (0.028)	-0.021 (0.039)	-0.006 (0.040)	-0.010 (0.040)	0.010 (0.038)	-0.062 (0.041)	-0.058 (0.042)	-0.059 (0.042)	-0.033 (0.041)
Married	0.028 (0.019)	0.030 (0.019)	0.025 (0.019)	0.023 (0.019)	0.069*** (0.026)	0.069*** (0.027)	0.061** (0.027)	0.046* (0.026)	-0.016 (0.028)	-0.026 (0.029)	-0.027 (0.029)	-0.016 (0.028)
Divorced	-0.009 (0.031)	-0.019 (0.032)	-0.007 (0.032)	-0.008 (0.031)	0.013 (0.038)	0.001 (0.039)	0.015 (0.038)	0.009 (0.038)	-0.014 (0.060)	-0.037 (0.061)	-0.039 (0.060)	-0.033 (0.060)
Widowed	0.086*** (0.033)	0.074** (0.033)	0.068** (0.033)	0.072** (0.032)	0.114*** (0.041)	0.102** (0.041)	0.097** (0.041)	0.086** (0.040)	0.086 (0.066)	0.076 (0.066)	0.074 (0.067)	0.093 (0.063)
Working (private)		0.034** (0.014)	0.033** (0.014)	0.028** (0.014)		0.023 (0.021)	0.024 (0.021)	0.020 (0.021)		0.056*** (0.020)	0.052*** (0.020)	0.048** (0.020)
Working (public)		-0.022 (0.024)	-0.025 (0.024)	-0.011 (0.024)		-0.048 (0.040)	-0.052 (0.040)	-0.034 (0.040)		0.014 (0.031)	0.011 (0.031)	0.027 (0.031)
Social Security (inc. Family)		0.041*** (0.015)	0.033** (0.015)	0.013 (0.015)		0.041** (0.020)	0.030 (0.020)	0.022 (0.020)		0.042* (0.023)	0.039* (0.023)	-0.001 (0.023)
Household size		-0.013*** (0.003)	-0.011*** (0.003)	0.002 (0.003)		-0.014*** (0.004)	-0.013*** (0.004)	-0.005 (0.004)		-0.011*** (0.004)	-0.010** (0.004)	0.008 (0.005)
Paying rent=1		0.001 (0.013)	0.005 (0.013)	0.003 (0.013)		0.025 (0.018)	0.032* (0.018)	0.027 (0.017)		-0.023 (0.019)	-0.025 (0.019)	-0.024 (0.018)
Religious beliefs of other people are important			-0.033*** (0.011)	-0.033*** (0.011)			-0.040*** (0.015)	-0.038** (0.015)			-0.026* (0.016)	-0.030* (0.016)
Gender related social pressure			-0.072*** (0.018)	-0.068*** (0.018)			-0.091*** (0.020)	-0.085*** (0.020)			-0.008 (0.040)	0.010 (0.040)
Tradition related social pressure			-0.025 (0.024)	-0.017 (0.024)			-0.025 (0.031)	-0.022 (0.031)			-0.030 (0.040)	-0.013 (0.040)
Political views related social pressure			0.003 (0.023)	-0.004 (0.022)			-0.015 (0.031)	-0.026 (0.031)			0.019 (0.033)	0.007 (0.033)
Religion related social pressure			-0.005 (0.027)	-0.014 (0.026)			0.010 (0.036)	0.005 (0.035)			-0.025 (0.040)	-0.033 (0.040)
Hometown related social pressure			-0.077*** (0.024)	-0.042* (0.024)			-0.046 (0.034)	-0.027 (0.033)			-0.107*** (0.034)	-0.048 (0.034)
Level of income related pressure			-0.045** (0.021)	-0.041** (0.021)			-0.072*** (0.027)	-0.066** (0.027)			-0.008 (0.032)	-0.010 (0.032)
Province fixed effects	No	No	No	Yes	No	No	No	Yes	No	No	No	Yes
Observations	8,301	8,301	8,301	8,301	4,300	4,300	4,300	4,300	4,001	4,001	4,001	4,001
Pseudo-R	0.0112	0.0151	0.0213	0.0497	0.0164	0.0205	0.0307	0.0614	0.00832	0.0130	0.0168	0.0572

Omitted categories are general higher secondary for education level, not married for marital status. Not working for labor status. Adana for provincial dummies.

Source: Life Satisfaction Survey (2013).

Table 7 Bivariate probit estimations – Average marginal effects

DV (Q1, Q2, Q3 and Q4)	All						Women						Men					
	(1) Q1	(2) Q2	(3) Q1	(4) Q3	(5) Q1	(6) Q4	(7) Q1	(8) Q2	(9) Q1	(10) Q3	(11) Q1	(12) Q4	(13) Q1	(14) Q2	(15) Q1	(16) Q3	(17) Q1	(18) Q4
Female =1	0.070** (0.035)	0.462*** (0.037)	0.070** (0.035)	0.448*** (0.036)	0.070** (0.035)	0.409*** (0.038)												
Age	0.019*** (0.006)	-0.027*** (0.006)	0.019*** (0.006)	-0.029*** (0.006)	0.019*** (0.006)	-0.010 (0.007)	0.020** (0.008)	-0.035*** (0.009)	0.020** (0.008)	-0.036*** (0.009)	0.020** (0.008)	-0.007 (0.009)	0.022** (0.010)	-0.024** (0.010)	0.022** (0.010)	-0.027*** (0.010)	0.022** (0.010)	-0.015 (0.011)
Age squared	-0.000** (0.000)	0.000*** (0.000)	-0.000** (0.000)	0.000*** (0.000)	-0.000** (0.000)	0.000* (0.000)	-0.000* (0.000)	0.000*** (0.000)	-0.000* (0.000)	0.000*** (0.000)	-0.000* (0.000)	0.000 (0.000)	-0.000 (0.000)	0.000*** (0.000)	-0.000 (0.000)	0.000*** (0.000)	-0.000 (0.000)	0.000* (0.000)
No school completed	-0.323*** (0.064)	0.497*** (0.066)	-0.323*** (0.064)	0.426*** (0.066)	-0.324*** (0.064)	0.300*** (0.068)	-0.386*** (0.086)	0.486*** (0.089)	-0.387*** (0.088)	0.435*** (0.088)	-0.387*** (0.086)	0.283*** (0.090)	-0.224** (0.117)	0.412*** (0.118)	-0.224** (0.117)	0.305*** (0.116)	-0.226** (0.117)	0.230* (0.125)
Primary education	-0.155*** (0.048)	0.345*** (0.051)	-0.155*** (0.048)	0.312*** (0.050)	-0.155*** (0.048)	0.251*** (0.054)	-0.228*** (0.073)	0.411*** (0.076)	-0.228*** (0.073)	0.368*** (0.075)	-0.228*** (0.073)	0.241*** (0.077)	-0.109 (0.067)	0.286*** (0.072)	-0.109 (0.067)	0.264*** (0.070)	-0.110* (0.067)	0.262*** (0.077)
Lower secondary education	-0.060 (0.060)	0.208*** (0.064)	-0.051 (0.060)	0.134** (0.063)	-0.052 (0.060)	0.169** (0.067)	-0.185* (0.095)	0.109 (0.098)	-0.185* (0.095)	0.075 (0.097)	-0.187** (0.094)	0.076 (0.099)	0.035 (0.080)	0.275** (0.084)	0.035 (0.080)	0.172** (0.083)	0.035 (0.082)	0.223** (0.080)
Vocational and technical high school	-0.090 (0.076)	-0.037 (0.084)	-0.090 (0.076)	-0.010 (0.081)	-0.090 (0.076)	0.125 (0.086)	-0.048 (0.125)	-0.132 (0.129)	-0.050 (0.125)	-0.013 (0.123)	-0.048 (0.125)	0.088 (0.128)	-0.146 (0.099)	0.029 (0.109)	-0.146 (0.098)	-0.022 (0.108)	-0.146 (0.098)	0.149 (0.117)
Tertiary education of 2 or 3 years	-0.004 (0.071)	-0.010 (0.078)	-0.004 (0.071)	-0.024 (0.075)	-0.005 (0.071)	0.060 (0.080)	0.017 (0.109)	0.101 (0.114)	0.017 (0.109)	0.085 (0.111)	0.015 (0.109)	0.005 (0.117)	-0.032 (0.095)	-0.082 (0.109)	-0.031 (0.095)	-0.103 (0.105)	-0.033 (0.095)	0.099 (0.111)
Tertiary education of 4 years	-0.001 (0.064)	-0.217*** (0.073)	-0.002 (0.064)	-0.162** (0.069)	-0.002 (0.064)	-0.164** (0.075)	-0.047 (0.102)	-0.333*** (0.116)	-0.047 (0.102)	-0.166 (0.109)	-0.049 (0.102)	-0.205* (0.112)	0.025 (0.084)	-0.119 (0.095)	0.025 (0.084)	-0.132 (0.091)	0.024 (0.084)	-0.156 (0.102)
Tertiary education of 5 or 6 years	0.074 (0.118)	-0.447*** (0.144)	0.074 (0.118)	-0.415*** (0.142)	0.075 (0.118)	-0.241* (0.144)	0.079 (0.179)	-0.537** (0.212)	0.081 (0.179)	-0.507** (0.217)	0.079 (0.178)	-0.546** (0.220)	0.046 (0.160)	-0.406** (0.200)	0.047 (0.160)	-0.347* (0.185)	0.047 (0.160)	-0.063 (0.190)
Doctorate	-0.015 (0.076)	0.256*** (0.078)	-0.016 (0.076)	0.175** (0.078)	-0.016 (0.077)	0.122 (0.082)	0.028 (0.109)	0.218** (0.111)	0.078 (0.108)	0.028 (0.110)	0.045 (0.108)	-0.090 (0.115)	0.314*** (0.111)	-0.092 (0.113)	0.291*** (0.111)	-0.092 (0.111)	0.291*** (0.111)	0.227** (0.119)
Married	0.074** (0.036)	-0.026 (0.038)	0.074** (0.036)	-0.037 (0.038)	0.074** (0.036)	-0.043 (0.040)	0.054 (0.056)	0.003 (0.059)	0.055 (0.056)	-0.033 (0.058)	0.055 (0.057)	-0.042 (0.060)	0.130** (0.053)	-0.060 (0.056)	0.130** (0.053)	-0.040 (0.055)	0.130** (0.055)	-0.051 (0.059)
Divorced	-0.029 (0.063)	-0.006 (0.070)	-0.029 (0.063)	0.023 (0.067)	-0.029 (0.063)	-0.006 (0.071)	-0.090 (0.107)	0.063 (0.120)	-0.091 (0.107)	0.042 (0.114)	-0.088 (0.107)	0.113 (0.117)	0.073 (0.083)	-0.061 (0.091)	0.073 (0.083)	0.022 (0.089)	0.073 (0.083)	-0.059 (0.095)
Widowed	0.061 (0.050)	0.012 (0.053)	0.061 (0.050)	0.041 (0.052)	0.061 (0.050)	-0.005 (0.055)	0.125* (0.071)	0.011 (0.074)	0.125* (0.071)	0.078 (0.073)	0.126* (0.071)	-0.001 (0.075)	-0.042 (0.077)	0.038 (0.084)	-0.042 (0.077)	0.026 (0.083)	-0.043 (0.077)	-0.004 (0.087)
Working (private)	-0.020 (0.083)	-0.569*** (0.094)	-0.020 (0.083)	-0.726*** (0.095)	-0.020 (0.082)	-0.505*** (0.097)	0.026 (0.102)	-0.571*** (0.112)	0.025 (0.102)	-0.698*** (0.114)	0.027 (0.102)	-0.526*** (0.116)	-0.090 (0.161)	-0.522*** (0.203)	-0.089 (0.161)	-0.657*** (0.204)	-0.091 (0.161)	-0.378** (0.199)
Working (public)	0.195** (0.089)	-0.009 (0.092)	0.194** (0.088)	-0.039 (0.091)	0.195** (0.088)	-0.058 (0.093)	0.233** (0.110)	-0.006 (0.113)	0.233** (0.110)	0.025 (0.112)	0.234** (0.110)	0.018 (0.114)	0.262 (0.185)	-0.037 (0.191)	0.259 (0.184)	-0.218 (0.194)	0.260 (0.185)	-0.255 (0.209)
Social Security (inc. Family)	0.035 (0.041)	-0.127*** (0.042)	0.035 (0.041)	-0.055 (0.042)	0.035 (0.041)	-0.053 (0.043)	0.059 (0.055)	-0.165*** (0.051)	0.059 (0.055)	-0.081 (0.057)	0.059 (0.055)	-0.112* (0.058)	-0.003 (0.063)	-0.095 (0.066)	-0.003 (0.063)	-0.045 (0.064)	-0.003 (0.063)	0.012 (0.069)
Household size	0.004 (0.009)	-0.005 (0.009)	0.004 (0.009)	-0.011 (0.009)	0.004 (0.009)	-0.016* (0.009)	-0.014 (0.012)	0.010 (0.012)	-0.014 (0.012)	0.002 (0.012)	-0.014 (0.012)	0.004 (0.012)	0.021 (0.013)	-0.019 (0.013)	0.021 (0.013)	-0.022* (0.013)	0.021 (0.013)	-0.036*** (0.014)
Paying rent=1	0.009 (0.034)	-0.069* (0.036)	0.009 (0.034)	-0.036 (0.035)	0.008 (0.034)	-0.113*** (0.037)	0.073 (0.047)	-0.091* (0.049)	0.073 (0.047)	-0.061 (0.048)	0.073 (0.047)	-0.179*** (0.050)	-0.064 (0.050)	-0.026 (0.053)	-0.064 (0.050)	0.012 (0.052)	-0.065 (0.052)	-0.028 (0.050)
Religious beliefs of other people are important	-0.088*** (0.030)	-0.021 (0.031)	-0.088*** (0.030)	-0.001 (0.031)	-0.088*** (0.030)	0.037 (0.032)	-0.104** (0.041)	-0.022 (0.043)	-0.104** (0.041)	-0.001 (0.043)	-0.104** (0.041)	0.035 (0.043)	-0.080** (0.043)	-0.018 (0.046)	-0.080** (0.043)	0.004 (0.045)	-0.080** (0.043)	0.037 (0.049)
Social pressure related to gender	-0.183*** (0.048)	-0.245*** (0.051)	-0.183*** (0.048)	-0.178*** (0.050)	-0.182*** (0.048)	-0.111** (0.052)	-0.231*** (0.056)	-0.253*** (0.059)	-0.231*** (0.056)	-0.217*** (0.058)	-0.230*** (0.056)	-0.089 (0.060)	0.028 (0.108)	-0.163 (0.122)	0.029 (0.108)	0.032 (0.113)	0.029 (0.108)	-0.197 (0.128)
Social pressure related to tradition pressure	-0.047 (0.065)	-0.185*** (0.072)	-0.047 (0.065)	-0.199*** (0.070)	-0.048 (0.065)	-0.068 (0.071)	-0.058 (0.083)	-0.236*** (0.089)	-0.058 (0.083)	-0.290*** (0.086)	-0.059 (0.083)	-0.119 (0.088)	-0.036 (0.109)	-0.063 (0.125)	-0.037 (0.109)	-0.000 (0.119)	-0.037 (0.109)	0.029 (0.121)
Social pressure related to political views	-0.012 (0.060)	-0.362*** (0.067)	-0.011 (0.060)	-0.279*** (0.063)	-0.011 (0.060)	-0.209*** (0.068)	-0.071 (0.085)	-0.277*** (0.091)	-0.071 (0.085)	-0.124 (0.088)	-0.070 (0.085)	-0.191** (0.093)	0.018 (0.088)	-0.490*** (0.102)	0.019 (0.088)	-0.477*** (0.097)	0.019 (0.088)	-0.240** (0.103)
Social pressure related to religion	-0.038 (0.070)	-0.009 (0.078)	-0.038 (0.070)	0.076 (0.075)	-0.038 (0.070)	0.073 (0.079)	0.014 (0.094)	0.010 (0.103)	0.015 (0.094)	0.118 (0.100)	0.015 (0.095)	0.159 (0.102)	-0.089 (0.108)	-0.055 (0.125)	-0.089 (0.108)	-0.022 (0.119)	-0.090 (0.108)	-0.028 (0.127)
Social pressure related to hometown	-0.114* (0.064)	0.020 (0.071)	-0.114* (0.064)	-0.043 (0.070)	-0.113* (0.064)	-0.003 (0.071)	-0.075 (0.091)	-0.059 (0.099)	-0.074 (0.091)	-0.183* (0.097)	-0.074 (0.091)	-0.109 (0.099)	-0.129 (0.094)	0.102 (0.104)	-0.130 (0.094)	0.105 (0.102)	-0.129 (0.102)	0.164 (0.102)
Social pressure related to level of income	-0.110** (0.055)	-0.225*** (0.060)	-0.110** (0.055)	-0.131** (0.059)	-0.110** (0.055)	-0.069 (0.061)	-0.178** (0.074)	-0.230*** (0.078)	-0.177** (0.074)	-0.121 (0.077)	-0.178** (0.074)	-0.051 (0.079)	-0.028 (0.086)	-0.214** (0.097)	-0.028 (0.086)	-0.136 (0.093)	-0.029 (0.086)	-0.080 (0.098)
Constant	-0.039 (0.163)	-0.430** (0.172)	-0.040 (0.163)	-0.304* (0.169)	-0.036 (0.163)	-0.905*** (0.179)	0.193 (0.220)	0.110 (0.232)	0.190 (0.219)	0.209 (0.226)	0.194 (0.219)	-0.483** (0.231)	-0.307 (0.249)	-0.395 (0.265)	-0.308 (0.249)	-0.311 (0.262)	-0.304 (0.262)	-0.916*** (0.294)
athrho	-0.051*** (0.019)		-0.092*** (0.019)		-0.116*** (0.020)		-0.071*** (0.026)		-0.098*** (0.026)		-0.138*** (0.026)		-0.026 (0.028)		-0.088*** (0.027)		-0.092*** (0.029)	
Observations	8,301	8,301	8,301	8,301	8,301	8,301	4,300	4,300	4,300	4,300	4,300	4,300	4,001	4,001	4,001	4,001	4,001	4,001

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

Omitted categories are general higher secondary education for education level, not married for marital status. Not working for labor status. Adana for provincial dummies.

Q1=Experienced a criminal incident and reported to police, Q2=Fair and impartial judicial system, no idea=1, Q3=Problems with judicial system, no idea=1, Q4=Are you satisfied with judicial services, no idea=1

Source: Life Satisfaction Survey (2013).

4. Conclusion

Demand-side analyses of covariates of access to justice have been predominantly assessed through provisional aspects of judicial services, mostly based on civil litigations and based on specific survey data or administrative data that relate to population already involved in a judicial process. Using nationally representative Life Satisfaction Survey we estimate factors affecting the reluctance to report a criminal incident in order to identify the dimensions of exclusion. First, this allows us to capture individuals that chose not to take a criminal incident to court. One explanation is that a large number of individuals do not go to court because they cannot frame their problem in legal terms. However, recognizing the experience of a criminal incident decreases this probability. Second, the variable can be considered as an objective, incident-based, indicator, unlike most survey questions on judicial services that are subjective. Third, reporting to the police, which is the first step of the judicial process in criminal incidents is less costly, if not costless, in monetary terms. More, police and gendarmerie services are widely available and easily reachable relatively to judicial services. These allow us decreasing the potential impact of factors such as cognitive requirements, costs and availability of judicial services, and assessing social factors affecting access.

We find that low levels of education negatively affect both men's and women's probability to report, women's more so. Another common factor that decreases the probability to report is the communitarian preferences, again more in the case of women. One reason is that preference for a communitarian lifestyle increases the probability of private, intra-community, conflict resolution together with the increased probability of the criminal incident to occur within the community. Contrary to men, women are more affected by social factors. Alongside the importance of their marital status, they are negatively affected by social pressures related to their gender and level of income. In order to test whether reluctance to report is related with reluctance to reveal preferences we run bivariate probit estimations of reluctance to report with questions on perception of and satisfaction with the judicial services and find that the two decisions are significantly correlated, more so in the case of women, a constraint on voice. The gender biased results of our study suggest that women face greater exclusion and are constrained in their choices. If pressures increase women's reluctance, this may be related with the private resolution issue: the efficiency of private resolution is highly complex, and is sometimes taken for granted, our results imply that it may not be an efficient solution from a gender perspective.