

# COMPARATIVE STUDIES IN ECONOMIC CRIME: OLD BEHAVIOURS, NEW CHALLENGES<sup>1</sup>

## ESTUDOS COMPARADOS NA ECONOMIA DO CRIME: VELHOS COMPORTAMENTOS, NOVOS DESAFIOS

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### ABSTRACT

*In consideration to the theoretical approach on the economics of crime, our study aims to contribute to the understanding of crime based on primary data obtained through the application of questionnaires/interviews with convicted people, who committed economic crimes (drug trafficking, robbery, among others). This empirical evidence was obtained from three different pieces of research: 1st) of convicted people in penal establishments in Paraná and Rio Grande do Sul; 2nd) of convicted people in the scope of the 4th Federal Court of Foz do Iguaçu (Paraná), whose criminal sentences have been replaced by community service or pecuniary sanctions; 3rd) of jailed women in the Rio Branco Women's Prison (Acre). As a result, for a significant percentage of the 670 people surveyed in the three pieces of research, the economic returns were, on average, higher than the costs of crime, meaning that crime is worth it.*

**Keywords:** *Cost-benefit relationship. Rationality. Criminality.*

### RESUMO

Tendo como referencial teórico a economia do crime, este trabalho procura contribuir para o entendimento da criminalidade a partir de dados primários obtidos via aplicação de questionários/entrevistas com apenados(as) cujas violações foram oriundas de crimes econômicos (tráfico de drogas, roubo etc.). Estas evidências empíricas foram extraídas de três diferentes pesquisas: 1ª) de apenados em estabelecimentos penais paranaenses e gaúchos; 2ª) de apenados da 4ª Vara da Justiça Federal de Foz do Iguaçu (Paraná), cujas penas privativas de liberdade foram substituídas por prestação de serviços à comunidade e/ou prestação pecuniária; 3ª) de mulheres presas na Unidade Prisional Feminina (UPF) de Rio Branco (Acre). Como resultado, para expressiva parcela das 670 pessoas pesquisadas nestas três pesquisas, os retornos econômicos foram, em média, maiores do que os custos do delito, o que significa dizer que o crime está, lamentavelmente, valendo a pena.

**Palavras-Chave:** Relação Custo/benefício. Racionalidade. Criminalidade.

1 Uma versão em português deste artigo foi publicada originalmente em um Livro da área de Direito e Economia.

## INTRODUCTION AND FORMULATION OF THE PROBLEM<sup>2</sup>

Gary Stanley Becker, a long-time professor at the University of Chicago and 1992 Nobel Prize in Economics, is considered one of the economists that have advanced beyond his time by theorising on rational behaviour from economic precepts. In the crime economy, one of his research areas, he stated that the offender of lucrative crimes (such as robbery), different from perpetrators of crimes of a non-profit nature (such as manslaughter), acts due to incentives in situations of uncertainty/risk, but behaves rationally (OLIVEIRA, 2011; SCHLEMPER, 2018).

However, what comes to be a crime of a profitable or economic nature? Instead, it is necessary to clarify that a crime “is an act of transgression of a law in force in society” (BRENNER, 2001, p. 32). Fragoso (1982, p.1) legally conceptualises economic crime as “[...] a crime, whose legal objectivity lies in the economic order, that is, in supra-individual well-interest, which is expressed in the regular functioning of the economic process of production, circulation and consumption of wealth.” According to Becker (1968), the profitable (economic) crimes have the pecuniary gain as their final objective, such as theft, robbery, usurpation, extortion, swindle, possession of stolen goods, narcotics trafficking, crimes against the public administration, among others. Non-profit (or non-economic) crimes are not aimed at profit, although they have economic consequences, such as rape, murder, abuse of power, torture, among others.

When Becker (1968) typified the crimes in economic and non-economic, he was basing a theory on the rational behaviour of the individual regarding the effectiveness of an illicit practice. In this theorisation, a person considering committing an economic offence is rationally evaluating if this illicit activity will provide him with more significant *gain vis-à-vis* a lawful activity. This criminal behaviour is therefore not considered an unintended, emotional or antisocial attitude, but a rational choice. It occurs because, by projecting the expected value of the gain from the crime, this person subtracts from this illegal activity its costs (namely: expenses with the criminal operation itself, the opportunity cost in the legal market and the moral costs of having his reputation affected), also considering the risk of being detained and the penalty that may eventually have to comply if arrested and convicted. After the evaluation of costs and benefits, with the expected gains showing to be superior to costs and risks, the tendency is for this person to commit the crime (OLIVEIRA, 2011; SCHLEMPER, 2018).

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<sup>2</sup> This introduction and problem formulation is based on Shikida (2020), which adapted this text to the scope of comaturing three studies with distinct researched audiences, to highlight their similarities and differences.

Summarising Gary Becker's theory in an equation (1), it is postulated that individuals are rational, with expected utility  $U_i$  expressed as the payoff, also expected by carrying out an illicit activity ( $R_i$ ) times the probability of not being arrested [ $1 - p(r)$ ], minus the cost of execution and planning of crime ( $C_i$ ), the cost of opportunity ( $O_i$ ), and the expected amount of punishment in case of being arrested [ $p(r) \cdot J_i$ ] and the moral loss arising from the execution of the crime ( $W_i$ ). If the benefit of this utility  $U_i$  is positive, the crime will be committed.

$$U_i = [1 - p(r)] \cdot R_i - C_i - O_i - [p(r) \cdot J_i] - W_i \quad (1)$$

In a line of research initiated in 1999 in Paraná, the economy of crime based on Becker's theory (1968) was first tested, in practice, in Brazil. Although embryonic, our study consisted of the analysis of economic crime based on empirical evidence, that is, primary data obtained through the application of questionnaires/interviews to defendants already convicted of economic crimes that were serving time in a given prison environment. The publication resulted from this study occurred in Schaefer and Shikida (2001). From this pioneering study, other articles were published following the line of research in crime economics, having the search for primary data in essentially Brazilian criminal establishments as a guideline (BORILLI and SHIKIDA, 2003; ENGEL and SHIKIDA, 2003; SHIKIDA, 2005; BORILLI and SHIKIDA, 2006; SHIKIDA *et al.*, 2006; BORILLI and SHIKIDA, 2009; SHIKIDA, 2010; SHIKIDA *et al.*, 2014).

As a summary of the main conclusions of this line of study, the theory of rational choice of the criminal agent, which evaluates costs and benefits arising from its illicit activities was corroborated. Therefore, the act of committing a crime is an individual decision taken rationally due to the perception of benefits and costs derived from this activity. In this context, for most detainees, economic returns were higher than the costs of efforts to commit the crime, which means that crime, unfortunately, paid off. Nevertheless, the company's goal should be to make null the average profitable return of the criminal entrepreneur, increasing the risk of illegal activity. It should be said, as an insight into the results of these studies in Brazil, the hard-hitting observation of the fragility of three major moral locks (family, religion and school) with the interviewees, who migrated to illegal activities due to the sum of this fragility, implicit in the estimation of costs (in equation 1 corresponds to  $W_i$ ). However, as a subsidy for public policies, society needs to improve actions that prevent crime, recover the basis "family, religion and school," in addition to expanding the offer of work (but offering remuneration capable of reducing the probability of migration to criminal activity). Besides, from a macro point of view, it is also needed to structure the

police and judicial facilities, strengthening the institutions linked, directly and indirectly, to fight crime. In short, it is urgent to discourage the criminal practice by breaking incentives that favour illegal activity.

From real information from offenders, the empirical research conducted in Brazil for the economics of crime raised and analysed the motivations of these people in committing the crime(s) of an economic nature – in which factors such as envy, ambition, greed, among others, were emphasised. The research also raised and analysed the socioeconomic circumstances of the occupational choice between the legal and illegal sector of the economy for this type of person – observing its typification; and last but not least, it raised and analysed if the economic crime paid off monetarily.

This article is based on the same theoretical premise of the rational behaviour of the criminal economy, after twenty years of the beginning of the first study done with this purpose, seeking to contribute to<sup>3</sup> the understanding of crime from primary data obtained through the application of questionnaires/interviews with the incarcerated population, whose violations derived from economic crimes (drug trafficking, theft, and others). This empirical evidence was extracted from three different studies, which will now be compared to observe their similarities and differences: 1) with in-prisons in criminal establishments of Paraná and Rio Grande do Sul (SCHLEMPER, 2018); 2) of the 4th Federal Court of Foz do Iguaçu (Paraná), whose custodial sentences were replaced by the provision of services to the community or cash provision, or both (NICKEL, 2019); 3) of women imprisoned in the Women's Prison Unit (UPF) of Rio Branco (Acre) (AMARAL, 2019).

This article contains four sections, including this introduction and formulation of the problem. The methodology, results and discussion are then exposed. The conclusions summarise our study.

## **METHODOLOGY**

Our research can be classified as a qualitative investigation based on a study of multiple cases incorporated since the scope is to identify factors or explanatory variables of specific phenomena or populations through perceptions and findings constructed throughout the research process in different spaces/

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3 Aiming at a greater linearity, this article does not require a theoretical review on Becker's theoretical model (1968), in favor of a greater use of the sections of methodology, results and discussion. However, we recommend the reading of Araujo Junior and Fajnzylber (2000), Cerqueira (2010), Oliveira (2011) and Schlemper (2018) – among other specialists in crime economics – to support this model.

units. In this respect, Yin (2001) classifies the study of multiple embedded cases as those in which several units of analysis and several observations for research are classified. Since we seek to explore various groups of detainees, from some prisons in three Brazilian states and a Federal Court of Justice, this type of study is more appropriate for a greater degree of generalisation of results (GIL, 2000; SCHLEMPER, 2018).

The first field research of a larger project funded by CNPq (National Council for Scientific and Technological Development), occurred throughout 2017 in two prisons in Paraná (State Penitentiary of Foz do Iguaçu - PEF-I - and Centre for Female Social Reintegration - CRESF), and in four other prisons in Rio Grande do Sul (Central Prison of Porto Alegre, Mother Pelletier Women's Penitentiary, Guaíba Women's State Penitentiary, and Arroio dos Ratos State Penitentiary). The total number of valid applied questionnaires was 302, and the questionnaire model was based on Schaefer and Shikida (2001), Borilli (2005) and updated by Schlemper (2018).

The second field research, also of a project funded by CNPq, consisted of analysing the sentences within the scope of the 4th Federal Court of Foz do Iguaçu (Paraná, Brazil), whose custodial sentences were replaced by the provision of services to the community or cash provision. Interviews were conducted with the application of questionnaires to 222 detainees in the 4th Court in 2019.

The third field survey occurred exclusively with women serving time or awaiting trial in the Women's Prison Unit (UPF) of Rio Branco (Acre), and 146 questionnaires/interviews were applied to prisoners of economic crimes of the UPF.

The three studies compared in our article result from two doctoral dissertations (SCHLEMPER, 2018; AMARAL, 2019) and a master's thesis (NICKEL, 2019). Further considerations about the procedure and technique of data collection, research instrument (questionnaire), institutional permission and other elements related to the methodology can be found more detailed in the studies mentioned above.

## **RESULTS AND DISCUSSION**

In this section, the article descriptively presents the frequency analysis of the main characterisations of the samples surveyed, according to the questionnaire

applied. Econometric analyses can be seen in Schlemper (2018), Amaral (2019) and Nickel (2019). Thus, the sociodemographic and criminal profiles and the cost/benefit ratio of criminal practice will be emphasised, the latter being one of the foundations of the economic theory of crime.

Table 1 shows the number of interviews conducted in each prison unit surveyed in Rio Grande do Sul and Paraná.

**Table 1 – Number of interviewees by prisons in Paraná and Rio Grande do Sul**

Prison unit	Number of respondents
Foz do Iguaçu State Penitentiary (PEF-I)	99
Centre for Female Social Reintegration (CRESF)	72
Porto Alegre Central Prison	43
Madre Pelletier Women's Penitentiary	21
Guaíba Women's State Penitentiary	16
Arroio dos Ratos State Penitentiary	51
<b>Total</b>	<b>302</b>

Source: Schlemper (2018, p. 89).

As a corollary, the sociodemographic profile of prisoners surveyed in the selected prisons of Paraná and Rio Grande do Sul showed the predominance of men born, mainly, in the states of Paraná and Rio Grande do Sul, mostly between 18 and 29 years old (61%), white and of urban origin, mostly Catholic, but many claimed to be non-practising (52%). The interviewees were mostly married (marital status), and 56% had other unions undone, a common practice for 34% of their parents (separated). The most common level of education found was middle school, interrupted in several cases for reasons such as involvement with crime, drugs, imprisonment and need for income. For the 65.2% that declared to have an occupation at the time of the crime, 40.7% were in formality and 50.7% in informality, and for 60.9% the income was between less than one minimum wage and three minimum wages, considered not sufficient to meet the basic needs for 46.7% of those surveyed. The use of alcohol, smoking and illicit drugs was considered relatively high for the first two cases (70% and 60%, respectively), frequently reported by 51% of the interviewees regarding the consumption of illicit drugs.

The sociodemographic profile of the 146 prisoners in the Women's Prison Unit (UPF) of Rio Branco (Acre) shows the prevalence of those born, mainly, in the states of Acre and Amazonas, mostly between 18 and 28 years old (72.7%), brown and of urban origin, mostly evangelical, but 35.1% claimed to be non-practising. The interviewees were mostly married (marital status), and 57.5% had other unions undone, a common practice for 48.6% of their parents

(separated). The most common level of education was high school, which was also interrupted for reasons such as involvement with crime and drugs. For the 52.7% that declared to have an occupation at the time of the crime, 16.67% were in formality and 83.3% in informality, and, for 97.9%, the income was between less than one minimum wage and three minimum wages, considered not sufficient to meet the basic needs for 68.5% of the surveyed. The use of alcohol, smoking and illicit drugs was considered relatively high for the first two cases (64.4% and 54.8%, respectively), frequently reported by 50.7% of the interviewees regarding the consumption of illicit drugs.

Regarding the result of the 222 prisoners under the 4th Federal Court of Foz do Iguaçu, their average sociodemographic profile can be described as the following: mostly men; white; born in Paraná; with an age group considered young (between 18 and 33 years old, totalling 55%); of urban origin; who believe in God; of those who claimed to have a religious belief (mostly Catholic), 59.5% said they practised and 40.5% do not practise the religion they professed; have middle education in the complete and incomplete group (47.3%); had as a reason for interrupting studies the need to contribute to the family income. A little more than half of the interviewees were working at the time of the crime, although informally, and earned between one and four minimum wages (51.8%). Regarding their life imprisonment, most used alcohol (51.8%), but most did not smoke (74.3%) or used illicit drugs (95.5%). About the marital status of the people surveyed, the most frequent was in informal union (45.5%), and it was found that 25.7% said that they had already undone their unions, whereas for 59.9% parents were also separated.

On the criminal profile of prisoners interviewed in the selected prisons in Paraná and Rio Grande do Sul, drug trafficking was the most common crime (64.2%); the motivation for the criminal practice was mainly decisions aimed at maximising well-being, or interactions in social groups that incentive the practice of illegal activity, emphasising the idea of easy gain, envy, ambition and greed (55.3%). The non-use of the weapon in the offence was more prevalent than its use. At this point, it is worth considering if this is related to the fact that the commercialisation of drugs does not imply the use of the attribute firearm, or if the Disarmament Statute is having any relation in this incidence. Besides, emphasis should be given on crimes committed as a team (81.5%), and the failure of the criminal activity was much due to police action (51%), informants (31%), and own failure (13.6%).

Regarding the criminal profile of UPF prisoners, drug trafficking was the most common crime (55.5%), and the primary motivation for

criminal practice was the idea of easy gain/induction of other people (43%). In our study, the use of a weapon in the crime was higher than its non-use (58.3%). It was found the practice of the offence done in partnership (50%) was equal to the act done individually (50%). The failure of the criminal activity occurred due to police action (43.2%), informants (42.5%), and own failure (4.1%).

On the criminal profile of the prisoners in the scope of the 4th Federal Court of Foz do Iguaçu, the most practised economic crime was contraband (52.7%), having as a primary motivation the idea of easy gain/induction of other people, ambition, greed/envy/maintaining status (46.1%), and police action being the main reason of the failure of criminal activity (86%). Since contraband and duty evasion perform as the most common crimes (the latter with 34.2% of occurrences), and 55.9% of the interviewees said they had “employers,” 41.9% worked on their own, and 2.3% did not answer. As well as in previous cases, the non-use of a weapon in the crime was more significant than its use, obviously due to the illicit typification practised that theoretically dispenses with this *modus operandi*.

The questions about the cost and economic benefit had a common intention: to verify if the benefits derived from criminal activity were sufficient to cover the associated costs. In this regard, the questions, in both studies compared, were as follows: from zero (minimum) to nine (maximum), what was the estimate of the cost of criminal practice? In this question, we computed the costs of execution and planning with the criminal operation itself, the cost of opportunity in the legal market, expected value of punishment in case of being detained and the moral costs of having its reputation affected. Likewise, from zero (minimum) to nine (maximum), what was the economic/financial return of your criminal activity? These scales were used to measure the practice of economic crime, and it is not advisable to ask what financial strength obtained from trafficking, robbery, or others, for this type of public (SHIKIDA, 2005; SCHLEMPER, 2018).

On this scale, the answers by the people interviewed in the selected prisons showed that the economic benefit was higher than the cost for 75%, equal to the cost for 18%, and lower than the cost for 7%. It implies that, for a significant proportion of those surveyed, the economic returns were higher *vis-à-vis* the costs of migration to crime. Moreover, the average benefit indicated by the interviewees was 6.25, and the average cost was 2.58, a difference (between benefit and cost) of 3.67, a value considered high, which shows how rewarding the practice of the profitable crime was, according to its perpetrators.

Regarding UPF prisoners, the economic benefit was higher than the cost for 63.7%; for 14.4%, this benefit was equal to the cost, while for 4.1%, the benefit was lower than the cost. No answer percentage was of 17.8%. The average benefit indicated by the interviewees was 5.6, while the average cost was 4.1, with the difference (between benefit and cost) being 1.5, a value considered high but lower than in the previous case. However, this relationship also shows how rewarding the practice of this crime was in economic terms according to its perpetrators.

When questioning the jailed – within the scope of the 4th Federal Court of Foz do Iguaçu – about the cost of criminal activity, the benefit was greater than the cost for 73% of the interviewees, higher than the benefit for 4.5%, and equal to the benefit for 16.7%; 5.9% did not know how to answer. The average value of the benefit was around 3.35, the cost was 1.01, and the difference between the benefit and the cost was 2.34. This result was slightly below the result found in the prisons of Paraná and Rio Grande do Sul; however, it was higher than for the prisoners of the UPF.

As a corollary, these consequences confirm one of the basic assumptions of Becker's economic theory of crime (1968), which lies in the expectation of profit from illegal practice through rational weighing between costs and expected benefits. Thus, when gains are higher than costs, in the discernment of the criminal agent, the tendency is for the crime to be carried out, especially with a combination of weakened moral locks.

These results are also in line with what Schaefer and Shikida (2001), Borilli (2005), and Shikida (2010) obtained, confirming the rational assessment of the gain/cost ratio by the people surveyed in a straightforward process of maximising the expected usefulness. Unfortunately, the lucrative crime continues to pay off according to data in our article, two decades after the beginning of this type of empirical study from primary data. Nonetheless, as an essential point to be highlighted, especially for a delinquent who aspires to obtain the positive  $U_i$  in Becker's equation (1968), the average life expectancy of a criminal is 25-26 years according to most of those surveyed in these three studies. In other words, it means that death, almost always violent, reveals a very small average longevity for those that live off economic crime, even though this crime is rewarding from the perspective of cost/benefit ratio.

## CONCLUSIONS

Based on the theoretical premise of the rational behaviour of the criminal economy, this article sought to contribute to the understanding of crime from primary data obtained through the application of questionnaires/interviews of three comparative studies. In total, 670 people were surveyed, whose violations came from economic crimes in the states of Paraná, Rio Grande do Sul and Acre.

As the main final points, the sociodemographic profile of the people surveyed showed that the three major moral locks (religion, family and education – not necessarily separated), which contribute to stunting migration to economic crime, are weakened. Although respondents believe in a god, claiming to be devotees of some religion, many did not practise the religion they professed. Regarding the family, we found that several unions, formal or informal, had already been undone, and this practice was also common for the parents of these people surveyed. As additional elements that are related to low schooling and family, there was a relatively expressive average for the use of alcoholic beverages, tobacco and illicit drugs for the portion of people that collaborated with the three studies in collate. The combination of these consumptions is based on a type of life considered inappropriate, denoting lack of family basis.

The predominant level of education found was middle school, interrupted in several cases for reasons such as involvement with crime/drugs/imprisonment and need for income.

Since these moral locks are weakened, the moral loss arising from the execution of the crime( $W_i$ ), exposed in Becker's equation, will not be expressive and, on the contrary, easily dispensed. The utility  $U_i$ , defined as the pay off expected by the performance of an illicit activity( $R_i$ ), will cover not only this moral cost but also the other costs – such as the cost of execution and planning of the crime( $C_i$ ), opportunity cost( $O_i$ ) and the expected amount of punishment in case of being arrested [ $p(r) \cdot J_i$ ]. Therefore, economic crime was committed because the financial benefits were, on average, higher than its costs, motivated mainly by the idea of easy gain, envy, ambition and greed/induction of other people. The novelty of this research that compares three studies among different participants, until then not existing in the previous questionnaires, is the revelation that the longevity of delinquent people is very low since they die early and violently in most cases.

Hence, at the end of this article and, considering not only the postulates of Becker's model (1968) but also the average life expectancy of a delinquent in

the world of crime, the inevitable questions that need to be revisited, reflected and discussed by the academy, criminal authorities and society itself are: does economic crime (“still”) pay off? Is it worth having money at the expense of losing moral condition? Nevertheless, is it not time for Brazil to tolerate, to the fullest, the old opportunistic behaviours based on the binomial “compensating economic crime” and “impunity”, ensuring new challenges for increasingly fair and perfect security<sup>4</sup> for our country? Reflect on it!

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<sup>4</sup> It is not the purpose of this article to comment on these challenges and propositions. However, this author is consistent with what is based on the National Plan for Criminal and Penitentiary Policy (2020-2023), of the National Council for Criminal and Penitentiary Policy (2019).

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