A Model-Based Exploration and Policy Analysis Related to Prostitution and Human Trafficking

András Kővári, Delft University of Technology, Delft, Netherlands
Erik Pruyt, Delft University of Technology, Delft, Netherlands

Abstract

This paper presents a model-based exploration and policy analysis related to prostitution and prostitution-related human trafficking. After a brief introduction to prostitution and prostitution-related human trafficking, the paper zooms in on the Dutch situation. A System Dynamics simulation model related to the Dutch situation developed to explore and provide policy insights is subsequently presented. Using the simulation model, policies are first of all tested, and preliminary conclusions are drawn. These preliminary conclusions are further tested under deep uncertainty, using variants of the simulation models. The final conclusions are that supply side measures alone are counter-productive and that demand side measures are necessary but insufficient to solve prostitution-related human trafficking.

Keywords: EMA, ESDMA, Human Trafficking, Prostitution, Swedish Model, System Dynamics

1. INTRODUCTION

Selling sex for money is often referred to as the oldest profession. According to the 2011 Global Risk report, prostitution has a $190 billion global market size (World Economic Forum, 2011), being listed as the 2nd largest among the illicit goods and services. Time and again it emerged as a hot topic for debate and went through cycles of criminalization-tolerance-legalization. Different countries have very different legislations for it today (see Figure 1). In most countries — rejecting the profession itself on various moral grounds — all forms of prostitution are illegal, and prostitutes are punished. Other countries tolerate prostitution, but prohibit organized forms. And in other countries prostitution is legal and deregulated. In either case, many countries face significant sex industry related human trafficking.

Since 2000, prostitution is legal and regulated in the Netherlands, where 75% of the population accepts it as a normal profession (White & Boucke, 2009). Regulation in the Netherlands was not only a response to the strong voice of women’s rights activists, but intended to be a
means of lifting the business out of the illicit sphere. However, it never became the happy, clean and free business that was dreamed of. It is still plagued by many facets of criminality: human trafficking, corruption, hard drugs, and murders. Meanwhile, Scandinavia took another path since 1999. First Sweden, then Norway, Iceland and Finland followed suit: punishing the act of buying sex in order to reduce demand. There the discussion was approached from a gender equality perspective and prostitution was banned. Prostitution is viewed there as violence against women and against gender equality, therefore being punishable. The first signs in Sweden show promising results in fighting human trafficking. Many other countries, including the US, are now considering adopting the Swedish model. Its possible success in other countries and cultures is highly debated though. And the introduction of new policies may result in unforeseen ‘side’ effects. Before introducing new policies, it is therefore useful to test new policies in a virtual laboratory using simulation models. Although many studies, like Aghatise (2004), discuss past and present dynamics of prostitution-related human trafficking and suggest policies, simulation models have hardly been used to analyze the dynamics of prostitution-related human trafficking, let alone to test and compare the dynamic effects of potential policies.

The purpose of this paper is to analyze the link between prostitution and human trafficking using an exploratory System Dynamics (SD) approach in order to provide a better understanding of prostitution and its link to the socio-economical-criminal system, to explore effects of uncertainties, and to analyze effects of alternative policies under uncertainty to support policy-making.

The rest of this paper is organized as follows. The problem of prostitution-related human trafficking is looked at in more detail in section 2. The methodology is briefly discussed in section 3. A simple aggregated SD model and its behavior are presented in section 4. Possible policy-interventions are explored and discussed in section 5. Policy robustness is tested across uncertainties and model variants in section 6. Section 7 consists of a discussion and concluding remarks.

2. THE PROBLEM

In its 2011 edition, the Global Risks report of the World Economic Forum presents experts’ view on the highest risk clusters in today’s global economy (World Economic Forum, 2011). One
High Performance Human Face Recognition using Gabor Based Pseudo Hidden Markov Model
[www.igi-global.com/article/high-performance-human-face-recognition/75826?camid=4v1a](www.igi-global.com/article/high-performance-human-face-recognition/75826?camid=4v1a)

An Architecture for Learning Environments Based on the Lightweight Integration of Intelligent Agents
[www.igi-global.com/chapter/architecture-learning-environments-based-lightweight/56073?camid=4v1a](www.igi-global.com/chapter/architecture-learning-environments-based-lightweight/56073?camid=4v1a)