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CANNABIS LEGALIZATION IN URUGUAY

A Good Idea Turning Into a Bad Experiment

Abstract

Uruguay is becoming the first country to legalize nation-wide production, sale and consumption of cannabis. Considering the failed war on drugs of the last decades, the Uruguayan alternative approach should be celebrated. However, this paper warns about the negative effects of over-regulation that will counteract a good deal of the expected benefits of legalization and even create new unintended consequences.

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Cannabis Legalization in Uruguay: Good Idea Turned Into a Bad Experiment

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The world is attentively observing and in most cases praising the Uruguayan groundbreaking legalization and regulation of cannabis, even though it is still in the early stages of implementation. The Uruguayan government has made a brave decision because Uruguay is becoming the first country in the world to legalize nationwide every step from the growing to the final consumption of marijuana. There are other examples of attempts to end the war on drugs, such as Holland or Portugal, focused on decriminalizing the last part of the process: consumption. In Uruguay consumption and possession in small quantities of any drug has not been a crime already since 1974. The new reform, one of the most far-reaching in the history of drug legalization, is only comparable to the reforms in the US states of Colorado and Washington.

There are many different practical and moral arguments to legalize cannabis, and the arguments could also be taken further to legalize every other drug. However, I should clarify that advocating for drug legalization does not necessarily mean advocating for drug consumption. Actually it could even be the contrary. Walter Block, a radical advocate of drug legalization clarified in one of his papers:

Nothing in this article should be taken as an indication that the author favours the use of the drugs discussed herein. Actually the very opposite is the case. While he opposes prohibition, he advocates all non-coercive methods –arguments, counseling, advertising, etc.- which lead to decreased or zero usage of these pernicious and immoral materials and substances. (Block, 1993, p. 698)

I subscribe what he said. That being clarified, I also agree with Block and Cussen when they correctly point out that legalizing drugs would:

prevent our civil liberties from being threatened, reduce crime rates, reverse the potency effect, improve the quality of life in inner cities, prevent the spread of disease, save the taxpayer money, and generally benefit both individuals and society as a whole (Block & Cussen, 2000, p. 536)

The purpose of this paper is not to make a new case for legalization. I assume that before reading this paper the reader has at least some understanding of the futility of the war on drugs. What I will do in the following pages is to analyze the success chances of the Uruguayan project. Assuming that positive results can be expected from cannabis legalization, what I will argue is that the over regulation that is being implemented together with the legalization will suppress a good deal of the expected positive outcomes and generate new unintended consequences.

If the Uruguayan project fails, I am afraid the failure could be used by prohibitionists to campaign for going back to the disastrous path of war on drugs. That is why I want to clarify that the real problem with the Uruguayan case resides on the over-regulation and not on the legalization. During the 90s economic reforms were done in Uruguay and the rest of Latin America. These reforms were far from being real free-market reforms. For example, state monopolies were substituted with corrupt, state-regulated, private monopolies. Still, because the reforms were promoted as liberal, liberalism ended up having a terrible reputation and those who oppose free-markets use the failed reforms of the 90s as a case against any present real free-market proposal. I am afraid something similar could eventually happen with drug liberalization if the dangers of over-regulation are not clarified soon enough.

Nobel Prize winner Mario Vargas Llosa wrote an article about Uruguayan legalization of cannabis. In the article he is positively surprised that a liberty-inspired reform took place under a leftist government led by a former guerrilla fighter (2013). I believe he should not be so enthusiastic, because the legalization could be something liberal, but the following over-regulation is not inspired in liberty. Uruguayan President Jose Mujica called this “an experiment with no guarantees” (Castaldi & Llambias, 2014). I would argue in this paper that paternalism is what seems warranted with the new regulations, because this experiment is not inspired by article ten of the Uruguayan constitution which states that “private actions of persons which do not in any way affect the public order or prejudice others shall be outside the jurisdiction of the magistrates” (1966). Instead, Mujica’s dream seems to be to replace the black market with a state monopoly that can monitor those who consume cannabis and even punish them if they do not play by the new rules. I could not agree more with Miron when he says the following:

Choosing drug policies based on paternalism potentially starts policy generally down a slippery slope. If government decides that it knows better about individual drug use than individuals themselves, it is a small step to assume that government knows best about how much people should exercise, what foods they should eat, how much they should study, where they should go to school, what books they should read, which religion they should practice, and so on. Governments throughout history have adopted coercive policies in all these areas. Unless one is confident that government paternalism will usually be benevolent, the potential for slippery slopes should generate caution about putting government in charge of personal decisions about drug use. (Miron J. , 2012, p. 139)

The thesis of this paper is that the new legislation, as it is expected to be carried out, will have many unintended consequences. Attempting to centrally plan and control the market will end up cancelling the benefits of legalization. Legalization with over-regulation and state control can turn out to be even worse than the previous non-enforced and relatively tolerant prohibition.

Cannabis in Uruguay

In Uruguay possession and use of cannabis and of any other drug has been legal already since 1974, thanks to a decree-law approved during the last military dictatorship. Article 31 of Decree-Law N°14294 decriminalized anyone who "has in his or her possession a reasonable quantity, exclusively for his or her personal consumption" (TNI Drug Law Reform Project, 2014). The contradiction for the last 30 years has been that Uruguayans could legally possess and consume reasonable quantities of drugs¹ while it was forbidden to buy, sell or produce them. Subsequent legislation partially modified the decree-law of 1974 introducing minor changes, but no legal mechanisms for obtaining cannabis or any other illegal drug were introduced.²

Public debate got relatively heated in Uruguay when toward the end of the 90s and the beginning of 2000s Uruguayan ex-president Jorge Batlle, from the conservative-leaning

¹ The limit of "reasonable" was left to the judge's discretion.

² For a more comprehensive legislative history of drug regulation in Uruguay see "Overview of drug policy, drug law and legislative trends in Uruguay", available online in: <http://www.druglawreform.info/>

Colorado Party, openly spoke first about legalizing marijuana and a few years later about legalizing all drugs. His views on the war on drugs were incredibly accurate already about 15 years ago, when he said that “During the past 30 years this has grown, grown, grown and grown, every day more problems, every day more violence, every day more militarization . . . This has not gotten people off drugs” (Rotella, 2001). He was one of the first heads of state in the world to make such bold statements for that time, but no legalization could be done during his government.

Even if previous debates were important to pave the wave of legalization, the big impulse took place from 2010 to 2013. Toward the end of 2010 Lacalle Pou, member of the other major Uruguayan conservative-leaning party and currently the main opposition leader candidate for presidency, presented a bill in congress to legalize cultivation for personal consumption. It was the first one of this type in Latin America. His bill was not accepted, but it gave impulse to other similar bills that were later drafted by congressmen from the whole political spectrum. In 2011 Uruguay saw big protests because a well-known sexagenarian woman was arrested for growing cannabis at her home for personal consumption. It was called the *Alicia Castilla case* and public opinion was shocked about it. Thanks to a mix of common sense, luck, and public pressure, she was released after around three months in jail and did not have to serve a longer sentence as the law mandates. The case encouraged legislators from different parties to continue negotiating a unified bill with elements from previous drafts.

In 2012 President Jose Mujica urged congress to finally legalize and regulate cannabis. The big difference was that this time the project was much more ambitious because it was not only about legalizing home growing of cannabis. This project included that production and distribution would be monopolized by the government. In addition, Mujica’s proposal introduced the possibility of compulsory rehabilitation for drug addicts and even increased some penalties. The draft was modified many times, especially regarding the issue of cultivation for personal consumption, and there was no agreement on the proposal of compulsory rehabilitation. Finally, in December 2013 Uruguay became the first country in the world to fully legalize cannabis after Law 19,173 was approved. In May

2014 the regulatory framework was unveiled with a lengthy regulatory decree that among other things created a regulatory agency³.

The new legislation

Legalization in its simplest form is to turn something illegal into something legal. This is achieved by eliminating the legal prohibitions, restrictions, sanctions and other types of government coercions against something that is considered illegal. Legalizing victimless crimes such as the growing, processing, selling and consumption of cannabis by consenting adults should be no exception. However, as the features of the Uruguayan cannabis legalization are unveiled we see that when government officials talk about legalization what they in fact mean is regulation. It is not the purpose of this paper to describe every detail of the new legislation. What I will do is to focus on the regulatory aspects that I believe will hinder the success of the legalization.

Uruguayan nationals or permanent legal residents who want to legally obtain marijuana will have to choose from only one of three options:

- 1) Purchase it from a government licensed retailer.
- 2) Cultivate it on their own.
- 3) Join a cannabis club.

For all the above-mentioned options Uruguayans will have to register and comply with a large amount of regulations, restrictions and controls. There are many reasons to believe that especially the first of the three mentioned options will have many unintended consequences. The rest of this paper will analyze it in more detail, focusing on the supply and demand mechanisms considering the fixed price government officials want to enforce. What will happen with the black market will enormously depend on the price incentives that are going to play a big role in a heavily regulated market that will not allow legal supply and demand market mechanisms to determine the value of the product. Understanding how prices work and influence consumption is of paramount importance when considering new public policies. However, until now, even after the legalization and subsequent regulations,

³ An unofficial English translation of the decree can be found in the following link: <http://www.druglawreform.info/images/stories/UruguayRegsENG.pdf>

little is known about the price besides that it will be fixed by the newly created regulatory agency. Uruguayan authorities promised several times, in local and international media, that the price will not be higher than one US dollar per gram of cannabis (Davies & De Deken, 2013). Therefore, price will not be “the value judgments of the consumers” (von Mises, 1949, S. 328). On the contrary, it will be whatever number the regulatory agency considers to be better. The goal government officials have also promised and constantly emphasized that they will somehow offer a higher quality product at a similar price than what consumers can find in the Uruguayan black market. I will now analyze the consequences that could have on the supply and demand side.

Supply

The legal supply will consist of a government granted oligopoly of no more than five heavily regulated firms. These firms will be responsible for every step from the growing until the distribution and selling to registered drugstores. Final consumers will only be able to buy cannabis at the drugstores at the promised price of \$1 per gram. How this final price is going to be profitable for the involved actors in the supply chain remains to be answered. In the US state of Colorado, several reports (Fixler, 2014; Steinmetz, 2014; Light, Orens, Lewandowski, & Todd, 2014, p. 22) mention that prices run from about \$24 to \$50 for 1/8 of an ounce, which would be the equivalent of around \$7 to \$14 a gram. Prices for recreational cannabis in leading medical marijuana centers such as The Clinic can be seen online (The Clinic Marijuana Center, 2014), and are about \$60 for 1/8 of an ounce, which would be around \$17 a gram. In any case, it could be said that prices in Colorado are at between 7 and 17 times higher than the projected price in Uruguay. It is not within the scope of this paper to do a comprehensive comparison of both markets, but it should at least be considered that regulations in Uruguay are going to be much stricter than in Colorado, as Uruguayan authorities themselves declared many times already. How in a smaller market with stricter regulations a price at least 7 times lower than the cheapest one found in Colorado is going to be profitable is one of the biggest question marks of the project. Julio Calzada, the head drug official in Uruguay recently declared that the Uruguayan government has a secret government-funded study that proves that all the experts who claim that growing marijuana for less than \$1 per gram is not possible are wrong. When a journalist asked to see the report, the response of Calzada was “You can see it, but you can’t read it” (Carless, 2014a).

A recent survey of scale economies in marijuana production shows that even in the long term, economies of scale are very mild and costs under \$1 would be certainly difficult to achieve (Hawken, 2013, p. 32-38).

Naturally, production costs vary enormously from one region of the world to another, and compliance with regulatory requirements might be one of the considerable costs. In Uruguay, producers will have to comply with a massive amount of regulations. Just to mention a few characteristics of the bureaucratic nightmare producers are going to face, consider that the very few companies which are going to be allowed to grow cannabis will have to pay for an advanced security system, including security guards 24/7, outer perimeter fences and video cameras in order to receive their licenses. Radio-frequency tags will be used to track the plants with electronic readers, and plants will have to be cloned using genetic markers. In an Orwellian effort, authorities want to be able to test the cannabis in possession of any user to check if it came from a registered, legal source (Haberhorn, 2014). Producers must assure distribution every 15 days to all registered drug stores in all Uruguayan territory. Packaging will also have to comply with several quality standards and can be no different than 5 or 10 grams. Costs significantly lower than \$1 per gram will be hard to achieve.

Experts have already suggested that the final price of \$1 per gram is not realistic (Carless, 2014b). Even if we suppose it could be, another important issue should be considered. Government officials want the price to be \$1 per gram because it will be mirroring the actual black-market prices. Black market prices could change, maybe dealers will be willing to reduce their profits and lower the price once they have official competition. Will the regulatory agency force the legal producers to reduce the selling price even more if the black market price changes? A price control policy based on mirroring the prices on the black market forever does not seem very sustainable. Drug dealers could afford lower prices because they sell a low-quality product, produced in Paraguay with lower costs.

The Uruguayan project faces a big dilemma. If government officials set a price higher than what can be found in the black market, they fear consumers will keep on buying illegally. If they set a similar price for a higher quality product, it might be impracticable and

will probably need to be subsidized, as Alicia Castilla⁴, one of the leading cannabis activists in Uruguay already suggested (Cortizas, 2014). Until now there has been no official confirmation that the growing of cannabis could be subsidized so this is just speculative. It would be extremely difficult to add a subsidy to a project that is already opposed by more than 60% of the population. In any case, the problems created by regulations will affect the supply side and the price problem cannot just be ignored. Uruguayan bureaucrats seem to be confident that one way or another, they will find a way to determine a price according to their whims. That is not as easy as they think, and even if they manage to do it, it will also have a huge impact on the demand side.

Demand

Due to the previous illegal nature of cannabis, it is very complicated to predict its price elasticity of demand. Few studies have examined this issue in the past in contexts that are significantly different from the Uruguayan case. To assume *ceteris paribus* is problematical because many of the other determinants of the demand are also going to change. Factors that could have a big influence in the consumer's preferences include for example: how consumers will value to continue dealing with black-market dealers in contrast to how they will value having to register and to be monitored by the government if they buy it legally. Among other contradictions, government officials expect consumers to voluntarily register and let a regulatory agency know about many details about consumers while the actual president (El Observador, 2014), the and the two main presidential candidates favor compulsory rehabilitation for drug addicts (Telenoche, 2014; El Pais [Uruguay], 2014). Nonetheless, that is far from being everything. Even if the government insists in prohibiting every possible cannabis advertising, it is hard to imagine that there will not be a change in the health risk perception. The fact that a product that was illegal to grow will now be sold at the same place where people buy their usual medications is likely to change the perceived health risks consumers have. Consequently, it is reasonable to think consumption will increase if the health risk perception decreases. The contradiction here is that while selling cannabis in official drugstores, education campaigns to alert the

⁴ This is the same Alicia Castilla who was arrested in 2011 for growing marijuana and I mentioned in the first part of this paper. She is now one of the fiercest opponents to the new legislation because she considers it to be extremely paternalistic.

population about the risks of consumption were promised. With so many misaligned incentives it would be truly hard to guess what consumers reaction will be. I will leave aside this issues and focus on price and quality.

Nowadays, what Uruguayan consumers buy consists mostly of Paraguayan low-quality marijuana for approximately the same price the government wants to sell a high quality product. This is because the big purpose of the new legislation is to take the cannabis consumers away from the black market. For the sake of the argument, I will for a moment suppose the Uruguayan government can predict rational consumer behavior and achieve the objective to offer a product that is overall more valued by consumers than the one offered in the black market for a similar price. This means consumers would tend to prefer to buy the product offered by the government. The problem is that I highly doubt government officials are taking into consideration what could happen to the demand when prices are fixed artificially low: it could encourage more consumption and lead to an increase in the demand of cannabis. What is worse, consumption will probably increase significantly among those under age. The few studies that have analyzed the price elasticity of the demand of cannabis have all come to slightly different results (Pacula, 2010; Ruggeri, 2013; Clements, 2009). However, they all conclude that there are big differences among different ages, the youngest being the most susceptible to changes in the price. For instance, a study made in the District of Columbia found out that cannabis demand has a unitary price elasticity for ages between 12 and 17 (Ruggeri, 2013, p. 34). If the government fixes an artificially low price, illegal sellers might lower their prices or offer stronger and more dangerous products to compete. Lawmakers could say that minors will not be allowed to legally buy cannabis. That is true, but they are also not allowed to legally buy alcohol and they drink it anyway. I would not be surprised if the new regulations end up increasing underage consumption by artificially lowering the prices.

In addition to the mentioned fixed price, there will be an arbitrary quota on individual purchases and an arbitrary output quota restriction for producers. That means that government officials are centrally planning beforehand how much it will be allowed to be produced, at what price it will be allowed to be sold and how much will individuals be allowed to buy. There are several possible scenarios regarding the individual quota. First, if it is too low for most of the consumers, it will mean that after consumers reach the quota,

they will resort to the black market to fulfill their needs. In this scenario, the black market could lose part of their market share, but it might not be significant. If the quota is too low for some consumers and too high for others, it will mean that those consumers that do not need to use all their weekly quota could buy it legally anyway, and sell it illegally at a higher price to those consumers for whom the quota is too low. In this case, government will be the supplier of a new type of black market, creating incentives for new small-scale dealers. According to government officials' predictions, the quota will be high enough for most of the consumers. If that is the case, it will mean that the government would create an incentive to buy a high quality product at an artificially low price and sell it illegally at a higher price outside Uruguayan borders. Uruguay has historically been a strong embarkation point for drugs destined for the European market. In addition, Uruguay has approximately one thousand kilometers of border with Brazil, most of it without any controls. For instance, there are several cities located along Uruguayan-Brazilian border where only a regular street indicates that one side of the city belongs to Brazil and the other side to Uruguay. Prices for high quality cannabis in neighboring countries Argentina and Brazil are higher than the promised \$1 per gram in Uruguay, and in Europe and other international markets prices are much higher. Even in the internal market there will be people for whom registering is not an option. Minors who are not allowed to buy legally and those who fear about their reputation if the supposedly confidential information of the registered users ever becomes public could become the clients of the new illegal market supplied by the government. In every possible scenario, unintended consequences are to be expected.

It could be argued that only a handful of companies will be able to produce a limited quantity. The quantity will be determined according to what regulators think should be enough to satisfy the Uruguayan market, which is relatively small for international standards. It could be said that no significant volume will leave the country. If that is the case, Uruguay will have a high quality product being legally offered at an artificially low price with the supply side of the market not being able to adapt to the demand because of the output quota restriction. If incentives are high enough to resell Uruguayan cannabis illegally, internally or in other countries, scarcity and queues are to be expected. History has shown innumerable times already that scarcity and queues means the appearance of the inevitable

black markets every central planning economy generates. Exactly what the government wanted to eradicate in the first place, plus new unintended consequences.

Even for the estimation of the domestic demand several questions can be raised. For instance, the estimates are based on the 5th National Home Survey on Drug Use (National Drug Observatory, 2012). The survey was done in 2011 and marijuana is very unlikely to be sold legally before 2015. That report states that consumption of marijuana has increased over time (p. 25) and there are no reasons to believe that it decreased from 2011 to 2015. This means that the demand will be already underestimated even before the first gram of cannabis is sold. The same official report claims that more than the half of the new marijuana consumers are underage (p. 27). As I explained in the previous paragraph, minors will keep on resorting to the black market. What could change is that they will now have easier access to buy from friends and relatives above 18 years old who will not use the weekly quota and will be willing to resell. The survey has other limitations, such as being too vague in some of the questions⁵ (National Drug Observatory, 2012, p. 51). To estimate the demand and centrally plan a new, highly regulated market, government officials used only this survey. It seems that the same way they are very confident about the government-funded, secret report about production costs, they are confident about one official, old and very limited survey to estimate the demand of a new market. Serious doubts about their predictions could be raised.

Other challenges

As previously analyzed, supply and demand will respond to the over-regulation and there will be many unintended consequences. However, there are many other threats that could also menace the viability of the project and will be shortly considered in this section.

⁵ Just to mention one example, the possible replies to those who replied that consumed marijuana were: one, a few times last year, a few times monthly, a few times weekly, or daily. This might be useful for many purposes but not so useful to accurately estimate a demand because a few times weekly could mean something very different from one person to another. Even the answer “daily” is highly imprecise because it does not say how many times a day. Another problem is that the replies do not include any information regarding how many grams of cannabis are used per joint, which could vary significantly among users because some might smoke pure cannabis while others might add just a little marijuana to the tobacco they smoke and this is not reflected in the answers.

Uruguay is about to hold general elections and the incumbent government is likely to lose its parliamentary majorities that approved cannabis legislation. Because the project is opposed by 63% of Uruguayans (Botinelli, 2013), the opposition parties are using the issue to position themselves strongly against it, even if politicians from the opposition parties previously supported drafts of legalization. On the other side, because the politicians of the incumbent party do not want to be seen as drug-friendly for legalizing cannabis, they are emphasizing that they are not doing this to promote freedom. They claim they want to legalize cannabis to use the state power to fight harder against the negative effects of drugs. Lacalle Pou, the main presidential opposition candidate and the first one to propose a bill for legalization, said a few weeks ago (El Pais [Uruguay], 2014) that this project is unrealistic and under the ten key points of his program number three is to repeal the new cannabis legislation (Partido Nacional, 2014). His vice-presidential candidate was very clear of his intentions when he declared the following shortly before: "We are going to overturn this law that legalized marijuana growing. Nobody plant anything! Don't plant anything because we're going to knock it down!" (Associated Press, 2014).

Another probable cause of failure of the project is that the crime reduction expected will not be easy to achieve. There are many reasons to be skeptical, which would be an interesting topic for another paper. Here I will just mention some of them. The cannabis black market in Uruguay, although illegal, is not a particularly dangerous one. As mentioned before in the paper, possession and consumption have been legal for decades, and although home-growing was illegal it was to a certain degree tolerated. Violence is usually associated with the dealing of other drugs. Jeffrey A. Miron suggested something similar about marijuana legalization in California: "Legalizers argue black markets are violent and corrupt, so legalization should reduce crime. This view is well-founded, but because the California's marijuana market is close to legal, the reduction in crime will be modest" (Miron J. A., 2010). Moreover, Uruguay is a relatively safe country compared with its Latin American neighbors, so even if the legalization contributes to reduce organized crime, the effect might not be as big as it could be in other countries. Uruguayan drug market is comparatively small, and drug cartels usually operate internationally, so the possible damage that could be inflicted to the drug cartels will be comparatively small.

A last important threat to the project is international pressure. UN officials have repeatedly criticized Uruguay of violating the 1961 Single Convention on Narcotics Drugs (The Huffington Post, 2014). In a recent academic paper, Robin Room explains the limited alternatives countries could have to legalize drugs, overcoming this difficulty, mentioning that “the international drug system's desire to maintain universality seems to take precedence over any dislike for nations taking this path” (Room, 2014).

Conclusion

It is still too blurry to be certain of how this experiment is going to end. Nonetheless, there are many reasons to doubt about its success: expansion of state power, price control, rationing, Orwellian registration and individual monitoring, endless regulations, and even the likelihood of subsidies. All of this will have unintended consequences, some of which were analyzed in this paper, especially those related to supply and demand.

The legalization and regulation of cannabis in Uruguay is being considered as a test case for other countries in the world that are pondering alternative solutions to the failed war on drugs. If this project turns out to be a fiasco, it is not legalization what should be blamed. It is actually the politicians' addiction to regulations and their ignorance of how markets work what should be condemned. One of the very few academic papers that compare regulations in Colorado, Washington and Uruguay states regarding Uruguayan restrictions that “if Uruguay's goal is to abolish the illicit cannabis market, then policymakers need to consider how some of these limitations might hinder this goal” (Pardo, 2014).

Hopefully there will other chances to do things right. After all, when debates about cannabis legalization started it was mostly about legalizing home growing. Public opinion, government and the opposition agreed to a certain degree about that and no huge state involvement was called for. It would have been a solid, worthy step in the path of legalization. The problem was that government officials, and especially Uruguayan President Jose Mujica, took advantage of the momentum and designed a much more elaborated project with the state as its main protagonist. Despite regulations, it is likely that more cannabis users will grow their own marijuana. Probably many of them will not comply with the rules, selling any excess they produce to friends and acquaintances. Even if a huge part of the project is destined to fail because of over-regulation and misaligned incentives, it

might still be useful to learn about the mistakes as long as those who oppose cannabis legalization do not use it as an example to continue the already clearly failed war on drugs. That would be an even worse idea, and the purpose of this paper was to forewarn that regulations can harm potentially good ideas such as the legalization of cannabis.

Works Cited

- Associated Press. (2014, June 02). Leading threat to Uruguay's newly legalized marijuana market loses in presidential primary. *Fox News*. Retrieved from:
<http://www.foxnews.com/world/2014/06/02/leading-threat-to-uruguay-newly-legalized-marijuana-market-loses-in/>
- Block, W. (1993). Drug prohibition: A legal and economic analysis. *Journal of Business Ethics*, 12(9), 689-700.
- Block, W., & Cussen, M. (2000, July). Legalize Drugs Now! An Analysis of the Benefits of Legalized Drugs. *American Journal of Economics and Sociology*, 59(3), 525-536.
- Botinelli, E. (2013, October 4). Las dudas y contradicciones de la sociedad sobre la legalización de la marihuana [Doubts and contradictions of society regarding legalization of marihuana]. (F. Villar, Interviewer) Retrieved from
<http://www.factum.edu.uy/node/1080>
- Carless, W. (2014, September 12). *Five interesting things we learned from the man in charge of Uruguay's weed*. Retrieved from:
<http://www.globalpost.com/dispatch/news/regions/americas/140912/uruguay-drug-czar-julio-calzada-interview>
- Carless, W. (2014, August 11). *The two big lies about pot in Uruguay*. Retrieved from:
<http://www.globalpost.com/dispatch/news/regions/americas/140807/uruguay-pot-price-marijuana-tax>
- Castaldi, M., & Llambias, F. (2014, February 13). Drug policy must change in U.S., Europe - Uruguay president. *Reuters*. Retrieved from:
<http://www.reuters.com/article/2014/02/13/us-uruguay-drugs-mujica-idUSBREA1C1XK20140213>
- Clements, K. W. (2009). *Economics and Marijuana: Consumption, Pricing and Legalisation*. Cambridge University Press.
- Constitution of the Oriental Republic of Uruguay. (1966, November 27). *Unofficial Translation*. Retrieved from Refworld:
<http://www.refworld.org/docid/3ae6b5600.html>

- Cortizas, G. (2014, September 4). Marihuana: cuestionan precio fijado por el gobierno [Marijuana: price fixed by the government is questioned]. *El Pais [Uruguay]*. Retrieved from: www.elpais.com.uy/informacion/marihuana-cuestionan-precio-fijado-gobierno.html
- Davies, J., & De Deken, J. (2013, December 15). The Architect of Uruguay's Marijuana Legalization Speaks Out. *Reason*. Retrieved from <http://reason.com/archives/2013/12/15/the-architect-of-uruguays-marijuana-legalization-speaks-out>
- Decree-Law N°14294. (1974, November 11). Uruguay. Retrieved from http://www.infodrogas.gub.uy/html/marco_legal/documentos/02-DecretoLey14294.pdf
- El Observador. (2014, February 19). Diferencias en el FA retrasan ley de internación compulsiva de adictos. *El Observador*. Retrieved from: <http://www.elobservador.com.uy/noticia/272036/diferencias-en-el-fa-retrasan-ley-de-internacion-compulsiva-de-adictos/>
- El Pais [Uruguay]. (2014, August 21). Lacalle Pou fustigó al gobierno por norma que reguló marihuana. *El Pais [Uruguay]*. Retrieved from <http://www.elpais.com.uy/informacion/lacalle-pou-fustigo-ley-marihuana.html>
- El Pais [Uruguay]. (2014, May 15). Lacalle Pou propone un "abrazo" tras la interna. *El Pais [Uruguay]*. Retrieved from: <http://www.elpais.com.uy/informacion/lacalle-pou-propone-abrazo-interna.html>
- Fixler, K. (2014, March 26). Pot Tourism: How to Buy Marijuana in Colorado. *Fodor's*. Retrieved from <http://www.fodors.com/news/pot-tourism-how-to-buy-marijuana-in-colorado-10403.html>
- Haberkorn, L. (2014, March 28). Uruguay to Track Pot by Genetic Markers. *Associated Press*. Retrieved from <http://bigstory.ap.org/article/uruguay-track-pot-genetic-markers>
- Hawken, A. (2013). *Economies of Scale in the Production of Cannabis*. BOTEC Analysis Corporation.
- Law 19172. (2013, December 20). Uruguay.

- Light, M. K., Orens, A., Lewandowski, B., & Todd, P. (2014). *Market Size and Demand for Marijuana in Colorado*. Colorado: The Marijuana Policy Group.
- Miron, J. (2012). Government Policy Toward Illegal Drugs: An Economist's Perspective. In E. Zedillo, & H. Wheeler (Eds.), *Rethinking the "War on Drugs" Through the US-Mexico Prism*.
- Miron, J. A. (2010, October 19). Don't buy the hype on pot legalization. *CNN*. Retrieved from <http://edition.cnn.com/2010/OPINION/10/19/miron.prop.19/>
- National Drug Observatory. (2012). *5th National Home Survey on Drug Use*. Retrieved from http://infodrogas.gub.uy/images/stories/pdf/v_enc_hogares_2011.pdf
- Pacula, R. L. (2010). Examining the Impact of Marijuana Legalization on Marijuana Consumption. *Working Paper*.
- Pardo, B. (2014). Cannabis policy reforms in the Americas: A comparative analysis of Colorado, Washington, and Uruguay. *International Journal of Drug Policy*, 25(4), 727-735.
- Partido Nacional. (2014). *Ten Key Points of the Program*. Retrieved from: <http://partidonacional.org.uy/portal/index.php/noticias/9-noticias/2096-lacalle-pou-apostaban-que-no-nos-ibamos-a-poner-de-acuerdo>
- Room, R. (2014). Legalizing a market for cannabis for pleasure: Colorado, Washington, Uruguay and beyond. *Addiction*, 109(3), 345-351.
- Rotella, S. (2001, January 28). Uruguay Leader Backs Drug Legalization. *Los Angeles Times*. Retrieved from: <http://articles.latimes.com/2001/jan/28/news/mn-18084>
- Ruggeri, D. (2013, June). Marijuana price estimates and the price elasticity of demand. *International Journal of Trends in Economics Management and Technology (IJTEMT)*, 2(3), 31-36.
- Steinmetz, K. (2014, September 10). Colorado Retail Marijuana Sales Finally Beat Medical. *Time*. Retrieved from: <http://time.com/3318719/colorado-retail-medical-marijuana-sales/>
- Telenoche. (2014, September 19). Vázquez propone rehabilitar a adictos. *Telenoche*. Retrieved from: <http://telenocheonline.com/vazquez-propone-rehabilitar-a-adictos/>

- The Clinic Marijuana Center. (2014, September). *Recreational Menu*. Retrieved from:
<http://www.thecliniccolorado.com/menus/capitolhill-recreational-menu>
- The Huffington Post. (2014, March 4). U.N. Still Upset Over Uruguay Legalizing Weed. *The Huffington Post*. Retrieved from: http://www.huffingtonpost.com/2014/03/04/un-uruguay-weed_n_4899261.html
- TNI Drug Law Reform Project. (2014). Overview of drug policy, drug law and legislative trends in Uruguay. Retrieved from: <http://www.druglawreform.info/en/country-information/uruguay/item/5667-uruguay2>
- United Nations Office on Drugs. (2014). *World drug report 2014*. United Nations Publications.
- Vargas Llosa, M. (2013, December 29). El ejemplo uruguayo. *El Pais [España]*. Retrieved from: http://elpais.com/elpais/2013/12/27/opinion/1388143836_633277.html
- von Mises, L. (1949). *Human Action*. Ludwig von Mises Institute. Retrieved from <http://library.mises.org/books/Ludwig%20von%20Mises/Human%20Action.pdf>

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