

The Vincent F. Amen Equilibrium
Simultaneous Methods on a Model

Equilibrium Research | The Bank Robbers Paradigm

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Account |

Two incarcerated men became friends and were going to be released within weeks of each other. After both were released, they started having regular meetings at each other's apartments. They were in need of money, and both made a decision they would rob a bank. They planned it all out. They purchased a cheap car, outfits and weapons.

On or about August 4 around 11 am the two men drove to a Commerce Bank. One of the men got out of the car dressed in black with a COVID face mask, the other man got out of the car and watched the area around the bank. One of the men walked into the bank with a weapon, went to the desk and demanded money, a robbery. The teller was scared and complied. Money started to be handed over. The other man ran from the car to the front door with his weapon waiting for his friend to exit. Finally the man who robbed the bank exited the door. Both ran to the car and took off.

Police arrived after they left. They began to investigate. When they checked the cameras there was no license plate but only the description of the car on video. The two bank robbers got away but not for too long. People in the community heard about the robbery and tips flooded in. Police followed leads until the robbers were caught. They both were charged, tried and sent back to jail.

A Model as it relates to the robbers two methods to rob a bank.

*We have one model with two methods within the same event.

Main Function |

$$Z = X_1Y_1D_1R_1 + X_2Y_2D_2R_2 + X_3Y_3D_3R_3 + x_ny_nd_nr_n$$

$$\begin{aligned} Z = & \text{Convict}(1)_1Y_1\text{Convict}(2)_1R_1 + \text{Apartment}_2Y_2\text{Apartment}_2R_2 + \text{Car}_3Y_3\text{Car}_3R_3 + \\ & \text{Outfit}_4Y_4\text{Outfit}_4R_4 + \text{Weapon}_5Y_5\text{Weapon}_5R_5 + \text{Date/Time}_6Y_6\text{Date/Time}_5R_6 + \\ & \text{Convict}_1\text{Driver}_7Y_7\text{D}_7R_7 + \text{Bank}_8Y_8\text{Bank}_8R_8 + \\ & X_9Y_9\text{Convict}_2\text{BankRobber}_9R_9 + X_{10}Y_{10}\text{Convict}_2\text{RobBanker}_{10}R_{10} + \\ & \text{Convict}_1\text{Car}_{11}Y_{11}\text{D}_{11}R_{11} + \text{Convict}_1\text{Police}_{12}Y_{12}\text{Convict}_2\text{Police}_{12}R_{12} \end{aligned}$$

Subfunction |

$$X_1Y_1D_1R_1 = A_1B_1G_1O_1 + A_2B_2G_2O_2 + A_3B_3G_3O_3 + A_nB_nG_nO_n$$

$$X_2Y_2D_2R_2 = A_1B_1G_1O_1 + A_2B_2G_2O_2 + A_3B_3G_3O_3 + A_nB_nG_nO_n$$

$$X_3Y_3D_3R_3 = A_1B_1G_1O_1 + A_2B_2G_2O_2 + A_3B_3G_3O_3 + A_nB_nG_nO_n$$

$$\text{Convict}(1)_1Y_1\text{Convict}(2)_1R_1 = \text{Man}_1B_1\text{Man}_1O_1 + \text{Tattoo}_2B_2G_2O_2 + a_n b_n g_n o_n$$

$$\text{Apartment}_2Y_2\text{Apartment}_2R_2 = \text{Plan}_1B_1G_1O_1 + A_2B_2\text{Listened}_2O_2 + a_n b_n g_n o_n$$

$$\text{Car}_3Y_3\text{Car}_3R_3 = \text{Identified}_1B_1\text{Identified}_1O_1 + \text{Purchased}_2B_2G_2O_2 + a_n b_n g_n o_n$$

$$\text{Outfit}_4Y_4\text{Outfit}_4R_4 = \text{Identified}_1B_1\text{Identified}_1O_1 + A_2B_2\text{Purchased}_2O_2 + a_n b_n g_n o_n$$

$$\text{Weapon}_5Y_5\text{Weapon}_5R_5 = \text{Identified}_1B_1\text{Identified}_1O_1 + \text{Purchased}_2B_2\text{Purchased}_2O_2 + a_n b_n g_n o_n$$

$$\text{Date/Time}_6Y_6\text{Date/Time}_5R_6 = \text{Day}_1B_1\text{Day}_1O_1 + \text{Time}_2B_2\text{Time}_2O_2 + a_n b_n g_n o_n$$

$$\text{Convict}_1\text{Driver}_7Y_7\text{D}_7R_7 = \text{Driving}_1B_1G_1O_1 + A_2B_2\text{ListenedtoMusic}_2O_2 + a_n b_n g_n o_n$$

$$\text{Bank}_8Y_8\text{Bank}_8R_8 = \text{CommerceBank}_1B_1G_1O_1 + \text{Location}_2B_2\text{Location}_2O_2 + a_n b_n g_n o_n$$

$$X_9Y_9\text{Convict}_2\text{BankRobber}_9R_9 = A_1B_1\text{MaskOn}_1O_1 + A_2B_2\text{EnteredBank}_2O_2 + a_n b_n g_n o_n$$

$$X_{10}Y_{10}\text{Convict}_2\text{RobBanker}_{10}R_{10} = A_1B_1\text{SpokeatTeller}_1O_1 + A_2B_2\text{PulledWeapon}_2O_2 + a_n b_n g_n o_n$$

$$\text{Convict}_1\text{Car}_{11}Y_{11}\text{D}_{11}R_{11} = \text{DroveAway}_1B_1G_1O_1 + \text{ListenedtoMusic}_2B_2\text{ListenedtoMusic}_2O_2 + a_n b_n g_n o_n$$

$$\text{Convict}_1\text{Police}_{12}Y_{12}\text{Convict}_2\text{Police}_{12}R_{12} = \text{Apprehended}_1B_1\text{Apprehended}_1O_1 + \text{LostMoney}_2B_2\text{LostMoney}_2O_2 + a_n b_n g_n o_n$$

Unknown Variable |

$x_n y_n d_n r_n = \text{Accomplice}_{13Y1D13R1}$

$\text{Accomplice}_{13Y13D13R13} = \text{Grandma}_{1B1G1O1}$

Motive |

To obtain Money or Get back to prison.

Statement |

This model can account for many variables and 2 or more models to be added to the main function. Both Convicts had different methods and roles. The model accounted for both roles and their method to rob the bank within one function. Convict1 was ultimately the getaway driver and Convict2, the bank robber. The method of each Convict 1 and Convict 2 to rob the bank was exhibited on the model. Both Convict1 and Convict2 did exhibit or share equilibrium points accounted for on the model.

Goal |

By determining equilibrium points in real time, one is able to solve the current situation or chain of events. The account can be written afterwards. The goal is speed and accuracy with use of a proof based model.

Conclusion |

This model can transcend in many different case studies. A model of a criminal enterprise working with another criminal enterprise. The overall method of one criminal enterprise and the other can be documented on the model. It also can be determined where there is the link between them or share equilibrium points. The key is to determine what is being researched; a model as it relates to the method or operational scheme or a model as it relates to the victims and denoted are the victims of both enterprises and where there is commonality when the enterprises work together. In the Bank Robber case, the bank, the teller and the community were victims.