



PagSeguro and StoneCo– Not “seguro” after all

The payment processors’ sole supplier has been raided by the FBI & Dept Homeland Security on cybersecurity concerns

PLEASE READ IMPORTANT DISCLAIMER – PAGE 2

October 27, 2021 –Viceroy are short PagSeguro (NYSE:PAGS) and StoneCo (NASDAQ:STNE), two Brazilian focused payment processors. After a raid by the FBI in conjunction the Department of Homeland Security on PAX Global Technology Ltd’s (SEHK: 327) Florida offices, we have serious concern for the operational integrity of both PagSeguro and StoneCo. We have been keeping an eye on the two companies for some time, but recent developments have prompted us to publish this brief note.

Both PagSeguro and StoneCo are dependent on Chinese company PAX Global Technology Limited for their POS terminals¹.

Yesterday, October 26, 2021, PAX Technology’s Florida locations were raided by the FBI with sources reporting that the machines have been used as malware droppers and command-and-control locations². We expect PagSeguro to be subject to significant regulatory action and scrutiny, with the clear possibility of legal action against the company by various counterparties.

We currently rely on one manufacturer to manufacture, test and assemble a significant amount of our POS devices. The Agreement for the Supply of Equipment, dated as of June 26, 2014, as amended from time to time, by and among PAX BR Comércio de Equipamentos de Informática Ltda., or PAX, Transire Fabricação de Componentes Eletrônicos Ltda., or Transire, and Net+Phone Telecomunicações Ltda, or Net+Phone, sets forth the types of POS devices to be sold by PAX and Transire to us and the standard terms and conditions governing this supply of POS devices. PAX and Transire together serve as our main supplier of POS devices. Consideration payable to PAX and Transire under this agreement is determined by the number of POS devices ordered by us. For more information, see Item 3. Key Information—Risk Factors—Some of the key components of our POS devices are sourced from a limited number of suppliers. We are therefore at risk of shortage, price increases, changes, delay or discontinuation of key components, which could disrupt and harm our business.

Figure 1 PagSeguro 2020 20-F³

Although PAX BR Comércio e Serviços de Equipamentos de Informática Ltda. is no longer our sole provider of POS devices, we are still substantially dependent on it to manufacture and assemble a substantial amount of our POS devices. We are, therefore, constrained by its manufacturing capabilities and pricing, and may face production delays or escalating costs if it is unable to manufacture a sufficient quantity of product at an affordable cost. Further, we could face production delays if it becomes necessary to replace this existing substantial supplier with one or more alternative suppliers.

Figure 2 StoneCo 2021 20-F⁴

The FBI’s official statement claimed the investigation remained active with the bureau searching PAX Technology’s Florida locations assisted by the Department of Homeland Security. Their statement also included the involvement of the Department of Customs and Border Protection and the Naval Criminal Investigative Services.

We note that it is rare for payment terminals themselves to be compromised: these devices are typically independently certified and tested under PTS standards. We believe it is far more likely that the payment workstations were compromised while running “fully integrated”, receiving card data and facilitating communication with payment processors.

Any breach is a material failure of both companies’ B2B internal audit controls and represents a serious risk to the PagSeguro’s PagBank license.

Security news site KrebsOnSecurity.com cites a corroborated source stating that two major financial providers in the US and UK had begun pulling PAX terminals from payment infrastructure. We expect this to be the main course of action for many customers⁵.

Until the full extent of the damages is confirmed we are unable to assign a target price to the securities of either company.

¹ PagSeguro and StoneCo Prospectuses

² <https://www.wokv.com/news/local/fbi-jacksonville-homeland-security-agents-investigating-outside-southside-business/BVFSPMUVUJHWRJTX56PSQDXAZ4/>

³ [PagSeguro 2020 20-F](#)

⁴ [StoneCo 2021 20-F](#)

⁵ <https://krebsonsecurity.com/2021/10/fbi-raids-chinese-point-of-sale-giant-pax-technology/>



Attention: Whistleblowers

Viceroy encourage any parties with information pertaining to misconduct within PAX Technology, PagSeguro, StoneCo, their affiliates, or any other entity to file a report with the appropriate regulatory body.

We also understand first-hand the retaliation whistleblowers sometimes face for championing these issues. Where possible, Viceroy is happy act as intermediaries in providing information to regulators and reporting information in the public interest in order to protect the identities of whistleblowers.

You can contact the Viceroy team via email on viceroy@viceroyresearch.com.

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